

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number B-6				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2013 Base <input checked="" type="checkbox"/> Option Period Number			Title of Work Assignment/SF Site Name Support for CCR final rule RIA				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 04/30/2012 To 04/29/2013				
Comments: The purpose of this action is to initiate Work Assignment B-6, entitled "Regulatory Impact Analysis for ORCR's Coal Combustion Residuals Final Rule." At this time, the EPA is ordering 528 LOE for Tasks 1 and 2 of the SOW. In accordance with the contract, the contractor shall submit a work plan and cost estimate.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
04/30/2012 To 04/29/2013										
This Action:						528				
Total:						528				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Mark Eads						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature) (Date)</div>						Phone Number 703-308-8615				
						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature) (Date)</div>						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature) (Date)</div>						Phone Number:				
						FAX Number:				
Contracting Official Name Wendy Rizzo						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature) (Date)</div>						Phone Number: 202-564-1596				
						FAX Number:				

Statement of Work
(22 June 2012)

Project Title: Regulatory Impact Analysis for ORCR's Coal Combustion Residuals
Final Rule
Contract No.: EP-W-12-013
Work Assignment No: B-6
Prepared by: Mark Eads, ORCR Economist, 703-308-8615 (COTR)
Rachel Alford, ORCR Program Analyst, 703-305-0894 (Alt. COTR)
US Environmental Protection Agency
Office of Resource Conservation & Recovery (ORCR)
Program Management, Communications & Analysis Division (PMCAO)
1200 Pennsylvania Avenue, NW, Mailstop 5305P
Washington, DC 20460
Period of Performance: Upon receipt to April 29, 2013

Purpose & Scope

The purpose of this work assignment is for the Contractor to provide analytic support to EPA for finalizing a "Regulatory Impact Analysis" (RIA) for EPA's up-coming Coal Combustion Residual (CCR) final rule (which EPA may promulgate in late-2012 or 2013). The CCR final rule concerns Resource Conservation and Recovery Act (RCRA) regulation of disposal of CCR in landfills and surface impoundments (ponds), by about +/-500 coal-fired electric utility plants.

This Statement of Work (SOW) falls under the scope of Task 2 "Regulatory Assessment: Costs Benefits, Economic and other Impacts" within EPA contract EP-W-12-013. This work assignment builds upon the Contractor's prior work performed for EPA in 2011-2012 under contract EP-W-07-011 work assignment 4-33, during which the Contractor developed a draft RIA document with a separate draft appendices document for EPA's up-coming CCR final rule. Both draft documents (deliverables) are to be completed by June 30, 2012, which is the expiration date for 4-33.

This SOW contains four tasks. **At this time, the contractor is only being tasked with Tasks 1 and 2. Once more details are known for Tasks 3 and 4, an amendment will be issued. The tasks are included here so that the contractor is aware that they may be ordered at a later date.**

- Task 1: Submit work plan & budget.
- Task 2: Draft responses to +/-1,100 public comments on the 2010 CCR proposed rule RIA.
- Task 3: Conduct miscellaneous analyses for, and/or assist with revisions to, the June 30, 2012, draft RIA, such as analyses or revisions to the RIA as may be required by the Office of Management and Budget (OMB) during their review of the CCR final rule in late 2012 or 2013.
- Task 4: Assist the Office of Resource Conservation and Recovery (ORCR) with the coordination of the CCR final rule RIA and the Office of Water (OW) Effluent Limitation Guidelines (ELG) proposed rule RIA.

The Contractor shall not begin Task 2 until July 1, 2012, after the Contractor completes the June 30, 2012, draft RIA (and appendices) under EP-W-07-011 work assignment 4-33. The Contractor shall

begin Task 3 and Task 4 upon receipt of an amendment from the Contracting Officer, the first of which the may be issued later in July or not until the following next few months (e.g., August, September, or October). The contractor shall not budget for travel under this work assignment.

Task 1: Submit Work Plan & Budget

Supply EPA with a proposed work plan, deliverables schedule, and cost for completing the tasks described in this SOW. For each of the tasks in this SOW which involves “environmental data” --- as defined according to EPA’s mandatory quality management system¹ --- the Contractor shall describe in the work plan, how the Contractor plans to apply quality assurance (QA), and indicate in the work plan that the Contractor shall include a brief (e.g., one paragraph or less) summary of QA activities in the monthly progress/invoice reports to the COTR for this work assignment. Because the types of “environmental data” involved in this SOW may mostly come from existing secondary sources which have already been subject to QA (e.g., peer-reviewed journals, and other Federal agencies such as the Energy Information Administration, the Census Bureau, and the Bureau of Labor Statistics), the QA activities for this SOW may only require the Contractor to (a) examine data, calculations, and calculation results (e.g., evaluate numerical outliers), and (b) double-check spreadsheet calculation formulae.

Task 1 Deliverable:

- Proposed work plan, deliverables schedule, and cost estimate (budget).

Task 2: Draft Responses to +/-1,100 Public Comments on the 2010 CCR Proposed Rule RIA

There are a total of about 410,000 public comments on EPA’s June 2010 CCR proposed rule, of which (a) +/-405,000 are form letters (from which only one example is posted electronically in the docket), (b) about 40,000 are non-substantive comments, and (c) about 5,000 are substantive comments. Additionally, there are 100s of public comments from a series of eight public hearings held between August and October 2010 on the proposed rule.² During 2011, EPA used another contractor to download and electronically bracket all of public comments into an online database tool (called “CommentWorks”) according to various topics/sub-topics related to the 2010 CCR proposed rule.

Exhibit 1 below lists the seven main topics ORCR used to bracket +/-1,100 public comments submitted on the 2010 CCR proposed rule RIA. **Appendix A** to this SOW provides a detailed itemization of all sub-topics under each of the seven main RIA comment brackets. For purpose of

1 As listed below, EPA’s mandatory quality management system covers two areas (source: definitions below are from page 8 of EPA’s “Quality Policy” document nr. CIO 2106.0, October 2011). Some of the work tasks of this SOW involve the use (i.e., analysis) of environmental data, but none of the tasks in this SOW involve the use of environmental technology.

- Environmental data: Any measurements or information that describe environmental processes, location, or conditions; ecological or health effects and consequences; or the performance of environmental technology. For EPA, environmental data include information collected directly from measurements, produced from models, and compiled from other sources such as databases or literature.
- Environmental technology: An all-inclusive term used to describe pollution monitoring, measurement and control devices and systems, waste treatment processes and storage facilities, and site remediation technologies and their components that may be utilized to remove pollutants or contaminants from or prevent them from entering the environment.

Additional information about EPA’s quality management system is available at <http://www.epa.gov/quality/>

2 Information about the eight public hearings, including lists of speakers and written transcripts, are available from EPA’s CCR public hearing website at <http://www.epa.gov/waste/nonhaz/industrial/special/fossil/ccr-rule/ccr-hearing.htm>

formulating a cost to complete this task, the Contractor shall assume that the COTR will address at least 20 percent of these public comments without input from the Contractor (i.e., as of the date of this SOW, the COTR has already completed responses to all of bracket 9.1 and to parts of brackets 9.2 and 9.5 listed in **Exhibit 1** below).

Task 2 Deliverables:

- The COTR will provide the Contractor with MSWord files containing the +/-1,100 public comments on the 2010 RIA as bracketed in **Exhibit 1** below. The Contractor shall draft individual responses for each public comment on the 2010 RIA, directly into each MSWord file. The Contractor shall not start this task until the COTR provides the Contractor with the MSWord files which contain the public comments on the 2010 RIA.

Exhibit 1		
Count of Public Comments on the 2010 CCR Proposed Rule RIA		
Bracket Item*	RIA Sub-Topic Categories	Count of Public Comments
9.1	General comments on RIA	12
9.2	Other general comments (e.g., about economic issues)	254
9.3	Regulatory costs	371
9.4	Regulatory environmental & economic benefits	99
9.5	Impacts on CCR beneficial uses	231
9.6	Net benefits	37
9.7	Supplemental analyses	63
Total public comments on the 2010 RIA =		1,067
* Bracket item numbers correspond to ORCR's final version (dated 3/24/2011) of the CommentWorks bracketing outline ORCR used to categorize the 2010 CCR proposed rule public comments into issue areas (i.e., topics and sub-topics categories).		

REMINDER: At this time, the contractor is not tasked with Tasks 3 and 4. The text remains so that the contractor is aware of possible follow-up activities to be ordered in the future.

Task 3: Conduct Miscellaneous Analyses for and/or Assist with Revisions to the June 30, 2012, Draft RIA for the CCR Final Rule

Based on review comments of the June 30, 2012, draft RIA from either the (a) ORCR CCR final rulemaking team, (b) ORCR management, (c) other EPA offices such as EPA's Office of Policy which are members of EPA's CCR final rule development workgroup, (d) OMB, and/or (e) other Federal agencies during OMB's inter-agency review of the CCR final rule, the COTR may require additional analyses or compilation of supporting materials for the CCR final rule RIA that are not yet identified. If needed, the scope and requirements for these supporting assessments and materials, and the necessary deliverable(s), shall be identified in an amendment to this work assignment. Six hypothetical example types of analyses under this task could be:

- Sensitivity analyses: Run one or more additional sensitivity analyses for certain key numerical factors applied in the June 30, 2012, draft RIA's industry compliance cost or benefit calculations. This type of analysis might require between one-hour to one-week level of effort.

- Alternative options/sub-options: Calculate the costs, benefits, net benefits, and benefit-cost ratios associated with one or more alternative configurations (combinations) of CCR final rule regulatory options and/or sub-options. This type of analysis might require between one-week and three-weeks level of effort, depending upon the count of such options/sub-options.
- Updated unitized values: Integrate new data into existing calculations (e.g., integrate any future OMB update to the social cost of carbon, or to the unitized monetary values assigned to other pollutant emissions, applied for monetizing air emission reduction benefits associated with CCR beneficial uses). This type of analysis might require between one-hour to one-week level of effort, depending upon the extent of cascading effect the updated unitized values would have on the chapters and appendices of the draft RIA.
- Data year comparison: Two examples; each might require one or two days level of effort.
 - Compare electricity plant inventories: Download and filter (i.e., utility industry, coal fuel, operating status) the 2010 EIA-923 database after it becomes available on the Energy Information Administration's (EIA's) website, for purpose of comparing the 2010 total counts of plants and 2010 CCR tonnage dispositions (i.e., CCR tonnages in landfills, ponds, storage, beneficial use, offsite disposal), with the respective tonnages from the 2009 EIA-923 database³ used in the June 30, 2012, draft RIA for the CCR final rule.
 - Compare CCR beneficial use tonnages: The American Coal Ash Association (ACAA) publishes on its website annual data updates on the tonnages of CCR "beneficially used" in 15 different industrial markets.⁴ The June 30, 2012, draft RIA for the CCR final rule used ACAA's data for year 2009 (which harmonizes with the 2009 EIA-923 data year used in the June 30, 2012, draft RIA). During EPA workgroup or OMB inter-agency review of the CCR final rule and draft RIA later in 2012 or 2013, ACAA may post more recent data years (2010, 2011) on its beneficial use webpage, which such reviewers could request a comparison to the 2009 data.
- New data/methods: Make revisions to the data and/or methods of the June 30, 2012, draft RIA as a result of EPA workgroup and/or OMB inter-agency review comments in late 2012 or 2013. This type of analysis might require between one-day to one-week level of effort depending upon the extent of cascading effect within the draft RIA and draft appendices document.

Task 3 Deliverable(s):

- Deliverables depend upon the scope and substance of each miscellaneous analysis for, or revisions to, the draft RIA as performed under this task. However, the exact analyses and revisions are unknown as of the date of this SOW.

Task 4: Assist ORCR with Coordination Between the CCR Final Rule RIA and the RIA for the EPA Office of Water's (OW) Upcoming Proposed Effluent Limitation Guidelines (ELG)

This is the most uncertain task of this SOW for two reasons: (a) EPA management has not yet decided whether and to what extent to conduct coordination of the RIAs between these two rulemakings (i.e., the CCR rule and the ELG), and (b) OW has not yet proposed the ELG as of the date of this SOW. Thus, it is difficult in this SOW to describe this task with any certainty. As directed by the CO in a possible future amendment, the Contractor shall assist with ORCR's coordination (i.e., comparison,

³ EIA's 2009 EIA-923 database is available at http://www.eia.doe.gov/cneaf/electricity/page/eia906_920.html

⁴ ACAA's annual CCR beneficial use data are available to the public for free downloading under the "Production & Use Statistics" webpage of the "Publications" category on their website at <http://www.acaa-usa.org/>

consistency cross-walk, or harmonization) between the assumptions, data, calculations, itemized regulatory cost elements, itemized regulatory benefit elements, and supporting analyses contained in the CCR final rule RIA, and as contained in the EPA Office of Water's (OW) RIA for its up-coming (late 2012 or 2013) proposed Effluent Limitations Guidelines (ELG) for the electric utility industry. However, because (a) some sections of OW's draft RIA which is under formulation in 2012 for the upcoming proposed ELG are based on CBI data collected from OW's 2010 ICR survey of the electric utility industry, and (b) the particular office within OW which is developing the ELG proposal denies access by contractors to its CBI data, the amendment for this task most likely will limit the role of the Contractor to working only with information related to the RIA for the CCR final rule. For purpose of formulating a cost for this task, if such coordination were to occur, some example tasks for the Contractor may involve:

- Generating from the baseline cost estimation spreadsheets of the CCR final rule RIA, an itemized "baseline" state regulatory compliance cost checklist for each 953 active and inactive CCR impoundments.
- Generating from the regulatory cost estimation spreadsheets of the CCR final rule RIA, an itemized CCR rule compliance cost checklist for each 953 active and inactive CCR impoundments.
- Using the above two checklists, estimating itemized baseline and itemized regulatory costs for each of the 953 active and inactive CCR impoundments, by apportioning the nationwide aggregate cost for each itemized cost element, according to the annual tonnage size and checklist assignment status for each impoundment.
- Conducting a similar estimation of itemized regulatory benefits for each of the 953 impoundments, according to the same or similar approach of the three bullets above.

Task 4 Deliverable(s):

- Deliverable(s) depend upon the scope and substance of the coordination conducted under this task, which is unknown as of the date of this SOW.

Schedule of Deliverables

The Contractor shall provide electronic versions of all deliverables via email. The Contractor shall also provide in electronic format to the COTR, any accompanying data spreadsheets used to produce the deliverables.

Schedule of Deliverables		
Task & Deliverable		Deliverable Due Dates
Task 1	Work plan with a list of deliverables and corresponding due dates, and cost quote.	According to the terms of contract EP-W-12-013 (i.e., within 20 calendar days)
Task 2	Draft responses to upwards of +/-1,100 public comments on the 2010 CCR proposed rule RIA.	Draft: October 1, 2012
		Final: Not required; the COTR will review and finalize the Contractor's responses to public comments, according to uniform response language agreed upon by the ORCR CCR team.
Task 3	Conduct other miscellaneous analyses for, or assist with revisions to, the June 30, 2012, draft RIA for the CCR final rule.	Draft: To be determined in a possible future amendment.
		Final: To be determined in a possible future amendment.
Task 4	Assist with ORCR's coordination between the CCR final rule RIA and the RIA for the upcoming OW ELG proposal.	Draft: To be determined in a possible future amendment.
		Final: To be determined in a possible future amendment.

Appendix A
List of Electronic Brackets ORCR Used to Bracket Public Comments
on EPA's June 2010 CCR Proposed Rule “Regulatory Impact analysis” (RIA)

Bracket Item	RIA Topics & Sub-Topics (FR, Vol.75, No.118, June 21, 2010 page references indicated in parentheses)	Count of Comments
9.1	General comments on RIA	12
	9.1.1. RIA problem statement	
	9.1.2. Visual appearance issues	
	9.1.3. Affected entities (NAICS codes, names/locations of plants, LF/SI data (e.g., GIS, size, age)	
9.2	Other general RIA-related comments (not about rulemaking requirements)	254
	9.2.1. General comments about economic issues/concerns (not small entity/business or energy)	
	9.2.2. General comments about small entity/business issues/concerns	
	9.2.2.1. Small electric utilities/electric cooperatives	
	9.2.2.2. Small businesses producing beneficial use products	
	9.2.2.3. Other small entities/businesses (e.g., other businesses, governments, nonprofits)	
	9.2.3. General comments about environmental justice issues/concerns	
	9.2.4. General comments about children’s health issues/concerns	
	9.2.5. General comments about adverse energy effects or issues/concerns	
9.3	Regulatory Costs: EPA requests comment on all data sources and analytical approaches for estimated costs (35213); EPA seeks comment on cost estimation uncertainty factors in RIA (35218, 35224)	371
	9.3.1. Historical/baseline costs	
	9.3.2. Incorrect cost assumptions	
	9.3.3. Liner costs	
	9.3.4. GW monitoring costs	
	9.3.5. Fugitive dust control costs	
	9.3.6. Wet-to-Dry conversion costs: EPA seeks data on costs of converting coal-fired power plants from wet handling to dry handling with respect to various air pollution controls, transportation systems, disposal units, and other heterogeneous factors (35224)	
	9.3.7. Costs to specific groups (industries, states, tribes, small businesses, etc.)	
	9.3.8. Corrective action costs: EPA seeks data on relevant RCRA corrective actions and related costs useful in characterizing potential costs for future actions (35224)	
	9.3.9. Response/Cleanup costs: EPA seeks info on other significant and catastrophic SI releases of CCRs or other similar materials and cleanup costs associated with these releases (35224)	
	9.3.10. Storage costs: EPA solicits specific comment on potential costs of proposed Subtitle C storage requirements for CCRs (35182); EPA seeks data on costs of storage of CCRs in tanks or tank systems, on pads, or in buildings (35224); EPA specifically solicits substantiating detail from commenters who suggest EPA has under-estimated CCR storage costs under Subtitle C (35159)	
	9.3.11. Other (e.g., over-/under-estimated costs except for storage)	
9.4	Environmental and Economic Benefits: EPA seeks additional data that would assist in expanding and refining EPA’s existing benefit estimates (35224); EPA seeks comment on benefit estimation uncertainty factors in RIA (35218, 35224)	99
	9.4.1. Appropriateness of benefits categories (e.g., ecological damage)	

Appendix A
List of Electronic Brackets ORCR Used to Bracket Public Comments
on EPA's June 2010 CCR Proposed Rule “Regulatory Impact analysis” (RIA)

Bracket Item	RIA Topics & Sub-Topics (FR, Vol.75, No.118, June 21, 2010 page references indicated in parentheses)	Count of Comments
	9.4.2. Incorrect benefit assumptions	
	9.4.3. Monetization issues (i.e., benefits not monetized or improperly monetized)	
	9.4.4. Avoided cancer benefits	
	9.4.5. Avoided catastrophic failure benefits	
	9.4.6. Avoided remediation cost benefits	
	9.4.7. Other (e/g., benefits over-/under-estimated)	
9.5	Impacts on CCR Beneficial Uses	231
	9.5.1. Accuracy of life cycle benefits	
	9.5.2. Industry-specific economic data: EPA solicits info/data on best means for estimating current and future quantities and changes in beneficial use of CCRs, as well as on price elasticity of CCR applications in beneficial use market (35222)	
	9.5.3. Impact scenarios (increase, decrease from stigma, no change): EPA requests comment on impact of stigma on beneficial use of CCRs re EPA’s potential impact scenarios (35215); EPA welcomes ideas on how to best estimate stigma effects for RIA and requests any data or methods that would assist (35223); EPA solicits info/data that will help quantify any potential stigma effects (35158)	
	9.5.4. Other	
9.6	Net Benefits	37
	9.6.1. Cost/Benefit scaling under Subtitle D options	
	9.6.2. Comparison of benefits to costs	
	9.6.3. Calculation of “net benefit” and “benefit-cost” ratios	
	9.6.4. Other	
9.7	Supplemental Analyses	63
	9.7.1. Energy Impact Analysis: EO 13211 (35228-35229)	
	9.7.2. Small Business Impact Analysis: RFA/SBREFA (35225)	
	9.7.3. Environmental Justice Analysis: EO 12898 (35229-35230)	
	9.7.4. Children’s Health Analysis: EO 13045 (35227-35228)	
	9.7.5. Paperwork Reduction Act, including comments on ICR (35224-35225)	
	9.7.6. Unfunded Mandates Analysis/UMRA (35225-35226)	
	9.7.7. Federalism Analysis: EO 13132 (35226-35227)	
	9.7.8. Consultation/coordination with Indian Tribal Governments: EO 13175 (35227)	
	9.7.9. Other	

Work Assignment Form, (WebForms v1.0)

Statement of Work
Amendment 1
(Revised Tasks 3 & 4: 18 July 2012)

Project Title: Regulatory Impact Analysis for ORCR's Coal Combustion Residuals Final Rule

Contract No.: EP-W-12-013 (Industrial Economics Inc.)

Work Assignment No: B-6

Prepared by: Mark Eads, ORCR Economist, 703-308-8615 (COTR)

Rachel Alford, ORCR Program Analyst, 703-305-0894 (Alternate COTR)

US Environmental Protection Agency

Office of Resource Conservation & Recovery (ORCR)

Program Management, Communications & Analysis Division (PMCAO)

1200 Pennsylvania Avenue, NW, Mailstop 5305P

Washington, DC 20460

SOW period: Upon receipt to April 29, 2013

Purpose & Scope

The purpose of this work assignment is for the Contractor to continue providing analytic support to EPA for finalizing a "Regulatory Impact Analysis" (RIA) for EPA's up-coming Coal Combustion Residual (CCR) final rule (which EPA may promulgate in late-2012 or 2013). The CCR final rule concerns RCRA regulation of disposal of CCR in landfills and surface impoundments (ponds), by about +/-500 coal-fired electric utility plants.

This Statement of Work (SOW) falls under the scope of Task 2 "Regulatory Assessment: Costs Benefits, Economic and other Impacts" within EPA contract EP-W-12-013. This work assignment builds upon the Contractor's prior work performed for EPA in 2011-2012 under contract EP-W-07-011 work assignment 4-33, during which the Contractor developed a draft RIA document with a separate draft appendices document for EPA's up-coming CCR final rule. Both draft documents (deliverables) are to be completed by June 30, 2012 which is the expiration date for 4-33.

This SOW contains four tasks:

Task 1: Submit work plan & budget.

Task 2: Draft responses to +/-1,100 public comments on the 2010 CCR proposed rule RIA.

Task 3: Assist ORCR with responding to review comments from the ORCR CCR Team, EPA CCR Rulemaking Workgroup, EPA Office of Policy, and OMB on the June 30, 2012 draft RIA.

Task 4: Assist ORCR with the coordination of the June 30, 2012 draft RIA with the EPA Office of Water's RIA for the Steam Electric Power Effluent Limitation Guidelines (ELG) proposed rule.

The Contractor shall not begin Task 2 until July 1, 2012 after the Contractor completes the June 30, 2012 draft RIA (and appendices) under EP-W-07-011 work assignment 4-33. The contractor shall not budget for travel under this work assignment.

Task 1: Submit Work Plan & Budget

Supply EPA with a proposed work plan, deliverables schedule, and cost for completing the Tasks described in this SOW. For each of the Tasks in this SOW which involves “environmental data” --- as defined according to EPA’s mandatory quality management system¹ --- the Contractor shall describe in the work plan, how the Contractor plans to apply quality assurance (QA), and indicate in the work plan that the Contractor shall include a brief (e.g., one paragraph or less) summary of QA activities in the monthly progress/invoice reports to the COTR for this work assignment. Because the types of “environmental data” involved in this SOW may mostly come from existing secondary sources which have already been subject to QA (e.g., peer-reviewed journals, and other Federal agencies such as the Energy Information Administration, the Census Bureau, and the Bureau of Labor Statistics), the QA activities for this SOW may only require the Contractor to (a) examine data, calculations, and calculation results (e.g., evaluate numerical outliers), and (b) double-check spreadsheet calculation formulae.

Task 1 Deliverable:

- Proposed work plan, deliverables schedule, and cost estimate (budget).

Task 2: Draft Responses to +/-1,100 Public Comments on the 2010 CCR Proposed Rule RIA

There are a total of about 410,000 public comments on EPA’s June 2010 CCR proposed rule, of which (a) +/-405,000 are form letters (from which only one example is posted electronically in the docket), (b) about 40,000 are non-substantive comments, and (c) about 5,000 are substantive comments. Additionally, there are 100s of public comments from a series of eight public hearings held between August and October 2010 on the proposed rule.² During 2011 EPA used another contractor to download and electronically bracket all of public comments into an online database tool (called “CommentWorks”) according to various topics/sub-topics related to the 2010 CCR proposed rule.

Exhibit 1 below lists the seven main topics ORCR used to bracket +/-1,100 public comments submitted on the 2010 CCR proposed rule RIA. **Appendix A** to this SOW provides a detailed itemization of all sub-topics under each of the seven main RIA comment brackets. For purpose of formulating a cost to complete this task, the Contractor shall assume that the COTR will address at least 20% of these public comments without input from the Contractor (i.e., as of the date of this SOW the COTR has already completed responses to all of bracket 9.1 and to parts of brackets 9.2 and 9.5 listed in **Exhibit 1** below).

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- Environmental technology: An all-inclusive term used to describe pollution monitoring, measurement and control devices and systems, waste treatment processes and storage facilities, and site remediation technologies and their components that may be utilized to remove pollutants or contaminants from or prevent them from entering the environment.

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² Information about the eight public hearings, including lists of speakers and written transcripts, are available from EPA’s CCR public hearing website at <http://www.epa.gov/waste/nonhaz/industrial/special/fossil/ccr-rule/ccr-hearing.htm>

Task 2 Deliverables:

- The COTR will provide the Contractor with MSWord files containing the +/-1,100 public comments on the 2010 RIA as bracketed in **Exhibit 1** below. The Contractor shall draft individual responses for each public comment on the 2010 RIA, directly into each MSWord file. The Contractor shall not start this task until the COTR provides the Contractor with the MSWord files which contain the public comments on the 2010 RIA.

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9.7	Supplemental analyses	63
Total public comments on the 2010 RIA =		1,067
* Bracket item numbers correspond to ORCR's final version (dated 3/24/2011) of the CommentWorks bracketing outline ORCR used to categorize the 2010 CCR proposed rule public comments into issue areas (i.e., topics and sub-topics categories).		

Task 3: Assist ORCR with Responding to Review Comments from the ORCR CCR Team, EPA CCR Rulemaking Workgroup, EPA Office of Policy, and OMB on the June 30, 2012 Draft RIA

ORCR expects to receive review comments on the June 30, 2012 draft RIA from the ORCR CCR Team, EPA CCR Rulemaking Workgroup, the EPA Office of Policy, as well as from OMB during their respective review periods for the draft 2012 DSW final rule and the draft RIA. The Contractor shall assist ORCR with responding to such review comments, as well as modifying (i.e., revising, recalculating) the June 30, 2012 draft RIA as necessary to be responsive to such comments. For purpose of formulating a workplan and budget for this task, the Contractor shall assume the need to assist ORCR with responding to each of the following types of review comments on the June 30, 2012 draft RIA:

- Evaluate modified technical requirements: Revise the June 30, 2012 draft RIA by evaluating additional or modified technical requirements for the final rule regulatory option. As of the date of this revised SOW, these requirements are still undergoing ORCR management discussion. The contractor may need to revise the draft RIA if these requirements are different from the approach applied in the June 30, 2012 draft RIA. Technical requirements which may be modified in the final rule include but are not limited to:
 - Large scale fill: The final rule may regulate (i.e., prohibit) "large scale CCR fill" based on a physical description but not based on quantity (tonnage) threshold.
 - Site flexibility: The final rule may provide site-by-site flexibility for power plants to implement different approaches/methods for compliance with the (a) impoundment closure requirements such as either dewater the impoundment in lieu of capping the closed impoundment, (b) corrective action, (c) demonstrate their CCR units are safe even though they do not meet the natural water table location restriction, (d) run-on/run-off controls.

- Associated wastes: The final rule may also include regulation of "associated wastes" (e.g., boiler cleaning wastes).
- Dust control: This requirement may change to include both "Best Management Practices" as well as air quality criteria.
- MSWLFs: Offsite MSWLFs which receive CCR may have additional requirements above existing 40 CFR 258 regulations placed on them such as (a) additional chemical constituents for groundwater monitoring, and/or (b) additional dust controls.
- Storage piles: The final rule may include storage requirements for CCR storage piles (e.g., concrete pads, roofs).
- Location standards: The final rule may include an additional certification standard.
- Sensitivity analyses: Run one or more additional sensitivity analyses for certain key numerical factors applied in the June 30, 2012 draft RIA:
 - Statutory limit: EPA-OGC indicated section 4005(a) of the RCRA statute allows state governments to extend compliance dates for facilities by 5-years for Subtitle D state waste management plans. Such state allowances would extend the 2018 impoundment closure deadline an additional five years to 2023. The contractor shall add a sensitivity analysis to Chapter 7 of the June 30, 2012 draft RIA which indicates how the benefits and costs would be reduced (by the additional 5-year time discounting effect) under an upper-bound assumption that all states would allow additional 5-years to 2023.
- Alternative options/sub-options: Calculate the costs, benefits, net benefits, and benefit-cost ratios associated with one or more alternative configurations (combinations) of final rule regulatory options and/or sub-options. This type of analysis might require between one-week and three-weeks level of effort, depending upon the count and breadth of any such alternative options/sub-options.
- Alternative methods/assumptions/data: Integrate alternative methods, assumptions, or data (e.g., updated unitized costs) into existing draft RIA numerical calculations:
 - Corrective action cost: The June 30, 2012 draft RIA does not include corrective action costs in the baseline (i.e., all four regulatory options feature full cost of corrective action implementation). This overstates corrective action costs in the regulatory options if states are remediating sites (in contrast, the draft RIA's benefits assumptions do assume remediation based on state programs). Downward adjust corrective action costs for all four regulatory options to be consistent with benefits.
 - Subtitle D recordkeeping requirements: The June 30, 2012 draft RIA assumes that separate engineers make each required certification. However, it is possible that a single engineer may complete multiple certifications at a single power plant. As of the date of this revised SOW, ORCR is reviewing the recordkeeping costs in the draft RIA to determine whether the costs may be downward adjusted.
 - Draft RIA Exhibit 5H: The six numerical percentages in this Exhibit need to be updated with ORCR's new failure rates based on the June 2012 revisions to the CCR final rule risk analysis.

Task 3 Deliverable(s):

- Deliverable(s) shall constitute written responses to review comments, as well as (a) finalized RIA document, and (b) finalized RIA appendices. The finalized RIA and appendices shall integrate the necessary revisions (i.e., modifications, corrections, edits, etc.) in response to review comments on the June 30, 2012 draft RIA.

Task 4: Assist ORCR with the Coordination of the June 30, 2012 Draft RIA with the EPA Office of Water's RIA for the Steam Electric Power Effluent Limitation Guidelines (ELG) Proposed Rule

This task consists of, but is not limited to, the following RIA coordination tasks involving requests from the EPA Office of Water (OW) for detailed information about the June 30, 2012 draft RIA:

- On-site landfill cost data (Need by July 31): In order for OW to accurately estimate costs that are consistent with ORCR methodologies, provide unitized cost values or a linear regression equation, based on CCR tonnage, for on-site landfill disposal. Provide a breakout of the capital and O&M equations associated with building a new landfill that conforms to state requirements (i.e., for each state provide the capital and O&M cost equations that are associated with the appropriate control options for that state). Based on Appendix H of the June 30, 2012 Draft RIA, it appears that there is a significant difference in costs between combination landfills and pile landfills; therefore, also provide an approach that OW could use to determine whether a combination or pile landfill is most appropriate at a plant level (e.g., based on state in which the landfill is located), as well as ORCR's definition of each term. Additionally, identify the control codes from Exhibits H-1 and H-2, in the June 30, 2012 Draft RIA, that are applicable to the current regulations to build a landfill in each state.
- Pond closure cost data (Need by July 31): In order for OW to accurately estimate costs that are consistent with ORCR methodologies, provide unitized cost values or a linear regression equation, based on CCR tonnage, for pond closures. Provide a breakout of the capital and O&M cost equations associated with closure and post-closure activities related to surface impoundments (i.e., capital and O&M cost equations for impoundment closures and capital and O&M cost equations for impoundment post-closure activities). If the closure and post-closure equations are dependent on the type of controls in place at the surface impoundment, then provide all appropriate equations and a listing of which equations should be applied to each individual pond in ORCR's pond population. Provide a listing of ORCR's pond population and the appropriate control codes from Exhibit H-3 of the June 30, 2012 Draft RIA that apply to each individual pond. Identify the percent moisture assumed to be in the wet tons of CCR as the basis for the cost equations.
- ORCR expected pond closures (Need by July 31): Provide a list identifying the specific ponds that are predicted to close under ORCR's preferred option. This list should include the plant ID and some indication of the specific pond predicted to close. If possible, also provide the CCR tonnage associated with the pond.
- Complete ORCR Pond Listing (Need by July 31): Provide a listing of all ponds included in ORCR's population and closure/retrofit analysis. If the full listing is the 934 ponds included in Exhibit G-4 of the June 30, 2012 Draft RIA, provide an Excel file with the data from Exhibit G-4. Otherwise, provide the listing of ponds including the plant ID, pond ID/name, and the liner information for the pond.
- Surface impoundment failure analysis (Need by July 31): Provide impoundment-level output of the analysis providing the following for each impoundment: (i) The year the impoundment is assumed to close in the baseline (due to conversion to natural gas, retirement, etc.); (ii) The year the impoundment is projected to close under each rule option; and (iii) The explicit cost categorization. Provide additional details for the assumptions made for impoundments not explicitly analyzed (i.e., impoundments not in the initial set of 732), in particular: (i) Which "low" cost category did ORCR assume for impoundments not explicitly analyzed; and (ii) Were any of these other impoundments assumed to retire under the baseline? If so, which impoundments and in what year? Provide details on impoundments (e.g., identifier used by the plant) to allow the matching of the ORCR information to OW data. For example, ORCR uses an identifier for each impoundment that is different from the identifiers used in our analysis, making it difficult to align our two universes based on identifies alone. Additional descriptive information could possibly help us achieve a better match between impoundments in the two sets. Confirm which of documents we should cite as the source of the information ORCR is providing.

- Data references (Need by August 15): OW's analyses use certain data previously provided in early 2012 by ORCR prior to production of the June 30, 2012 draft RIA. Review the following information to confirm the appropriate information to include in OW's ELG proposed rule record:
 - Transportation costs: OW is using the \$3.257/ton for on-site landfill transportation and \$9.234/ton for off-site construction & debris transportation based on the September 2, 2011 email from DPRA Inc.(Dave Gustafson). Identify the references for these transportation costs and provide the final documentation that can be made publicly available, if these data are not copy-right protected.
 - Off-site disposal costs: OW is using the average state construction & debris landfill unit costs based on the "Landfill Unit Costs.xlsx" spreadsheet provided on September 2, 2011 in the email from DPRA Inc. (Dave Gustafson). Based on the email, the data are from Chartwell Solid Waste Group, 2007, Solid Waste Digest, Digest Year 17. Provide this document for inclusion in OW's ELG proposed rule record if these Chartwell data are not copy-right protected.

Task 4 Deliverable(s):

- Deliverable(s) consist of supplying the documentation (documents) as well as other written materials (e.g., written explanations of methodologies) and associated data spreadsheets, as itemized above.

Schedule of Deliverables

The Contractor shall provide electronic versions of all deliverables via email. The Contractor shall also provide in electronic format to the COTR, any accompanying data spreadsheets used to produce the deliverables.

Schedule of Deliverables		
Task & Deliverable		Deliverable Due Dates
Task 1	Work plan with a list of deliverables and corresponding due dates, and cost quote.	Draft: According to the terms of contract EP-W-12-013 (i.e., within 20 calendar days)
		Final: According to the terms of contract EP-W-12-013 (i.e., within 20 calendar days after receipt of COTR comments)
Task 2	Draft responses to upwards of +/-1,100 public comments on the 2010 CCR proposed rule RIA.	Draft: October 1, 2012
		Final: Not required; the COTR will review and finalize the Contractor's responses to public comments, according to uniform response language agreed upon by the ORCR CCR team.
Task 3	Assist ORCR with responding to review comments from the ORCR CCR Team, EPA CCR Rulemaking Workgroup, EPA Office of Policy, and OMB on the June 30, 2012 draft RIA	Draft: WAM will supply the contractor with an initiation date for this task, which for some but not all of the items listed under this task, occur between August 1 and December 31, 2012.
		Final: Five workdays from receipt of WAM review comments, unless otherwise specified by the CO according to WAM's advice.
Task 4	Assist ORCR with the coordination of the June 30, 2012 draft RIA with the EPA Office of Water's RIA for the Steam Electric Power Effluent Limitation Guidelines (ELG) Proposed Rule	Draft: Dates for the specific items listed under this task range from July 31 to August 15, 2012. WAM will establish via Technical Directive the dates for any additional items under this task.
		Final: Five workdays from receipt of WAM comments, unless otherwise specified by the CO according to WAM's advice.

Appendix A
List of Electronic Brackets ORCR Used to Bracket Public Comments
on EPA's June 2010 CCR Proposed Rule “Regulatory Impact analysis” (RIA)

Bracket Item	RIA Topics & Sub-Topics (FR, Vol.75, No.118, June 21, 2010 page references indicated in parentheses)	Count of Comments
9.1	General comments on RIA	12
	9.1.1. RIA problem statement	
	9.1.2. Visual appearance issues	
	9.1.3. Affected entities (NAICS codes, names/locations of plants, LF/SI data (e.g., GIS, size, age)	
9.2	Other general RIA-related comments (not about rulemaking requirements)	254
	9.2.1. General comments about economic issues/concerns (not small entity/business or energy)	
	9.2.2. General comments about small entity/business issues/concerns	
	9.2.2.1. Small electric utilities/electric cooperatives	
	9.2.2.2. Small businesses producing beneficial use products	
	9.2.2.3. Other small entities/businesses (e.g., other businesses, governments, nonprofits)	
	9.2.3. General comments about environmental justice issues/concerns	
	9.2.4. General comments about children’s health issues/concerns	
	9.2.5. General comments about adverse energy effects or issues/concerns	
9.3	Regulatory Costs: EPA requests comment on all data sources and analytical approaches for estimated costs (35213); EPA seeks comment on cost estimation uncertainty factors in RIA (35218, 35224)	371
	9.3.1. Historical/baseline costs	
	9.3.2. Incorrect cost assumptions	
	9.3.3. Liner costs	
	9.3.4. GW monitoring costs	
	9.3.5. Fugitive dust control costs	
	9.3.6. Wet-to-Dry conversion costs: EPA seeks data on costs of converting coal-fired power plants from wet handling to dry handling with respect to various air pollution controls, transportation systems, disposal units, and other heterogeneous factors (35224)	
	9.3.7. Costs to specific groups (industries, states, tribes, small businesses, etc.)	
	9.3.8. Corrective action costs: EPA seeks data on relevant RCRA corrective actions and related costs useful in characterizing potential costs for future actions (35224)	
	9.3.9. Response/Cleanup costs: EPA seeks info on other significant and catastrophic SI releases of CCRs or other similar materials and cleanup costs associated with these releases (35224)	
	9.3.10. Storage costs: EPA solicits specific comment on potential costs of proposed Subtitle C storage requirements for CCRs (35182); EPA seeks data on costs of storage of CCRs in tanks or tank systems, on pads, or in buildings (35224); EPA specifically solicits substantiating detail from commenters who suggest EPA has under-estimated CCR storage costs under Subtitle C (35159)	
	9.3.11. Other (e.g., over-/under-estimated costs except for storage)	
9.4	Environmental and Economic Benefits: EPA seeks additional data that would assist in expanding and refining EPA’s existing benefit estimates (35224); EPA seeks comment on benefit estimation uncertainty factors in RIA (35218, 35224)	99
	9.4.1. Appropriateness of benefits categories (e.g., ecological damage)	

Appendix A
List of Electronic Brackets ORCR Used to Bracket Public Comments
on EPA's June 2010 CCR Proposed Rule “Regulatory Impact analysis” (RIA)

Bracket Item	RIA Topics & Sub-Topics (FR, Vol.75, No.118, June 21, 2010 page references indicated in parentheses)	Count of Comments
	9.4.2. Incorrect benefit assumptions	
	9.4.3. Monetization issues (i.e., benefits not monetized or improperly monetized)	
	9.4.4. Avoided cancer benefits	
	9.4.5. Avoided catastrophic failure benefits	
	9.4.6. Avoided remediation cost benefits	
	9.4.7. Other (e/g., benefits over-/under-estimated)	
9.5	Impacts on CCR Beneficial Uses	231
	9.5.1. Accuracy of life cycle benefits	
	9.5.2. Industry-specific economic data: EPA solicits info/data on best means for estimating current and future quantities and changes in beneficial use of CCRs, as well as on price elasticity of CCR applications in beneficial use market (35222)	
	9.5.3. Impact scenarios (increase, decrease from stigma, no change): EPA requests comment on impact of stigma on beneficial use of CCRs re EPA’s potential impact scenarios (35215); EPA welcomes ideas on how to best estimate stigma effects for RIA and requests any data or methods that would assist (35223); EPA solicits info/data that will help quantify any potential stigma effects (35158)	
	9.5.4. Other	
9.6	Net Benefits	37
	9.6.1. Cost/Benefit scaling under Subtitle D options	
	9.6.2. Comparison of benefits to costs	
	9.6.3. Calculation of “net benefit” and “benefit-cost” ratios	
	9.6.4. Other	
9.7	Supplemental Analyses	63
	9.7.1. Energy Impact Analysis: EO 13211 (35228-35229)	
	9.7.2. Small Business Impact Analysis: RFA/SBREFA (35225)	
	9.7.3. Environmental Justice Analysis: EO 12898 (35229-35230)	
	9.7.4. Children’s Health Analysis: EO 13045 (35227-35228)	
	9.7.5. Paperwork Reduction Act, including comments on ICR (35224-35225)	
	9.7.6. Unfunded Mandates Analysis/UMRA (35225-35226)	
	9.7.7. Federalism Analysis: EO 13132 (35226-35227)	
	9.7.8. Consultation/coordination with Indian Tribal Governments: EO 13175 (35227)	
	9.7.9. Other	

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number B-6				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: <div style="text-align: right;">000002</div>				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2013			Title of Work Assignment/SF Site Name				
			Base Option Period Number 6			B-06				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/30/2012 To 04/29/2013					
Comments: The purpose of this amendment is to approve the contractor's work plan/cost estimate dated July 16, 2012, and additional cost estimate for tasks 3 and 4 dated July 27, 2012. The combined total LOE for both cost estimates is now 1,288 hours and \$126,006.77 (b)(4) cost (b)(4) fee).										
<input type="checkbox"/> Superfund					Accounting and Appropriations Data					<input checked="" type="checkbox"/> Non-Superfund
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE:						
04/30/2012 To 04/29/2013										
This Action:										
Total:										
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Mark Eads							Branch/Mail Code:			
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature) (Date)</div>							Phone Number 703-308-8615			
							FAX Number:			
Project Officer Name Shannon Sturgeon							Branch/Mail Code:			
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature) (Date)</div>							Phone Number: 703-605-0509			
							FAX Number: 703-308-7903			
Other Agency Official Name							Branch/Mail Code:			
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature) (Date)</div>							Phone Number:			
							FAX Number:			
Contracting Official Name Wendy Rizzo							Branch/Mail Code:			
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature) (Date)</div>							Phone Number: 202-564-1596			
							FAX Number:			

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number B-6				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: <div style="text-align: right;">000003</div>				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2013			Title of Work Assignment/SF Site Name				
			Base <input checked="" type="checkbox"/> Option Period Number			RIA for CCR Final Rule				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/30/2012 To 04/29/2013					
Comments: The purpose of this amendment is to approve the work plan revision dated Sept. 25, 2012 which shifts 37 hours from the prime to the sub-contractor. The total cost plus fixed fee remains at \$126,006.77, and LOE remains at 1,288 hours.										
<input type="checkbox"/> Superfund					Accounting and Appropriations Data					<input checked="" type="checkbox"/> Non-Superfund
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 1,288				
04/30/2012 To 04/29/2013										
This Action:						0				
Total:						1,288				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Mark Eads						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature) (Date)</div>						Phone Number 703-308-8615				
						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature) (Date)</div>						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature) (Date)</div>						Phone Number:				
						FAX Number:				
Contracting Official Name Wendy Rizzo						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature) (Date)</div>						Phone Number: 202-564-1596				
						FAX Number:				

Revised Statement of Work
(Revised Task 3: 29 Jan 2013)

Project Title: Regulatory Impact Analysis for ORCR's Coal Combustion Residuals Final Rule

Contract No.: EP-W-12-013 (Industrial Economics Inc.)

Work Assignment No: B-6

Prepared by: Mark Eads, ORCR Economist, 703-308-8615 (COTR)

Rachel Alford, ORCR Program Analyst, 703-305-0894 (Alternate COTR)

US Environmental Protection Agency

Office of Resource Conservation & Recovery (ORCR)

Program Management, Communications & Analysis Division (PMCAO)

1200 Pennsylvania Avenue, NW, Mailstop 5305P

Washington, DC 20460

SOW period: Upon receipt to April 29, 2013

The purpose of this revised Statement of Work (SOW) is to direct the Contractor to reduce the 680 hours LOE for Task 3 of the Contractor's July 27, 2012 workplan for work assignment B-06, by 50% (fifty percent) to 340 hours.

The scope of the Contractor's original workplan for work assignment B-06 was only to perform Tasks 1 and 2 listed below for 528 LOE hours. Amendment 1 to the workplan added 760 LOE hours for Tasks 3 and 4 listed below, for a total 1,288 LOE hours in the Contractor's July 27, 2012 amended workplan.

Task 1: Submit work plan & budget.

Task 2: Draft responses to +/-1,100 public comments on the 2010 CCR proposed rule RIA.

Task 3: Assist ORCR with responding to review comments from the ORCR CCR Team, EPA CCR Rulemaking Workgroup, EPA Office of Policy, and OMB on the June 30, 2012 draft RIA.

Task 4: Assist ORCR with the coordination of the June 30, 2012 draft RIA with the EPA Office of Water's RIA for the Steam Electric Power Effluent Limitation Guidelines (ELG) proposed rule.

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number B-6				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: <div style="text-align: right;">000004</div>				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2013			Title of Work Assignment/SF Site Name				
			Base <input checked="" type="checkbox"/> Option Period Number			WA B-6 CCR Final Rule				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/30/2012 To 04/29/2013					
Comments: The purpose of this amendment is to cut the total work required under Task 3 by 50% (fifty percent). It is estimated that this reduction will bring LOE down by 340 hours. The new total LOE for this work assignment is now 948 hours. The contractor shall submit a letter plan/cost estimate reflecting the de-scope in work and hours.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
04/30/2012 To 04/29/2013										
This Action:						948				
Total:						948				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Mark Eads						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature) (Date)</div>						Phone Number 703-308-8615				
						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature) (Date)</div>						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature) (Date)</div>						Phone Number:				
						FAX Number:				
Contracting Official Name Christie Deskiewicz						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature) (Date)</div>						Phone Number: 202-564-3316				
						FAX Number:				

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <h1 style="margin: 0;">EPA</h1> </div> <div style="text-align: center;"> United States Environmental Protection Agency Washington, DC 20460 </div> </div> <h2 style="text-align: center; margin-top: 10px;">Work Assignment</h2>		Work Assignment Number B-6								
		<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000005								
Contract Number EP-W-12-013	Contract Period 04/30/2012 To 04/29/2013 Base X Option Period Number	Title of Work Assignment/SF Site Name Regulatory Impact Analysis								
Contractor INDUSTRIAL ECONOMICS, INCORPORATED		Specify Section and paragraph of Contract SOW								
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval		Period of Performance From 04/30/2012 To 04/29/2013								
Comments: The purpose of this amendment is to approve the contractor's letter plan/cost estimate dated February 19, 2013 for a de-scope of Task 3 by 340 hours and \$25,891.26. The new total LOE for this work assignment is now 948 hours and \$100,115.51 (b)(4) cost (b)(4) fee.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
SFO (Max 2) 22 Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period: 04/30/2012 To 04/29/2013		Cost/Fee:		LOE: 948						
This Action:				0						
Total:				948						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:				LOE:		
Cumulative Approved:				Cost/Fee:				LOE:		
Work Assignment Manager Name Mark Eads							Branch/Mail Code:			
<div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>							Phone Number 703-308-8615			
							FAX Number:			
Project Officer Name Shannon Sturgeon							Branch/Mail Code:			
<div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>							Phone Number: 703-605-0509			
							FAX Number: 703-308-7903			
Other Agency Official Name Lee Hofmann							Branch/Mail Code:			
<div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>							Phone Number: 703-308-8479			
							FAX Number:			
Contracting Official Name Christie Deskiewicz							Branch/Mail Code:			
<div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>							Phone Number: 202-564-3316			
							FAX Number:			

Work Assignment Form, (WebForms v1.0)

Statement of Work
Work Assignment No. B-7
EPA Contract #: EP-W-12-013

1. **TITLE:** CERCLA 108(b) – Economics Support for Financial Assurance Rulemaking

2. **PERIOD OF PERFORMANCE:** Date of CO signature through 12/31/2012

3. **WORK ASSIGNMENT MANAGER:** **Scott Palmer**
Economics and Risk Analysis Staff
Office of Resource Conservation & Recovery

Mailing Address:
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Alt WAM: **Becky Cuthbertson**
Economics and Risk Analysis Staff
Office of Resource Conservation & Recovery

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E-mail: cuthbertson.becky@epa.gov

4. **IN-DEPTH BACKGROUND ON PROJECT AND PRIOR CONTRACT SUPPORT:**

In late 2003, then US Environmental Protection Agency's (EPA's) Acting Deputy Administrator Stephen L. Johnson requested a comprehensive review of the Superfund program, with the objective of identifying opportunities for program efficiencies that would enable the Agency to ultimately complete more long-term clean-ups. The review, which came to be known as the 120-day Study, resulted in 102 recommendations to improve the Superfund program. Recommendation 12 suggested, "For facilities not covered under RCRA, OSWER should study whether promulgating new regulations under CERCLA's broad financial assurance authorities could reduce the future needs of the Superfund program." CERCLA, Section 108(b) requires EPA to promulgate regulations that compel classes of facilities (not governed by RCRA) to establish and maintain evidence of financial responsibility consistent with the degree of risk associated with the production, transportation, treatment, storage, and disposal of hazardous substances.

Subsequently, USEPA has been involved in significant ongoing analyses to assess the need to promulgate financial assurance regulations under CERCLA, 108(b). In an initial study of recent (post-

1990) NPL sites, EPA identified a number of superfund sites representing seven general industry sectors for further examination. Under a former Work Assignment with Industrial Economics (IEc) (WA B-17), completed in December 2007, IEc performed detailed research and analysis of the seven industry categories previously identified by EPA. The information packet was used to support a briefing given to the Assistant Administrator for EPA's Office of Solid Waste and Emergency Response (OSWER) to assess next steps in the regulatory process. IEc also produced a draft report known as the Phase 2 report, (under WA 1-17) that documents, in detail, the methods employed and results of IEc's examination of facilities and industry practices performed under Work Assignment B-17.

A follow-on ruling issued by the United States District Court for the Northern District of California also found that EPA must identify and publish notice of priority classes of facilities that should be subject to financial assurance requirements. And subsequently, IEc conducted additional work (under WA 2-17), with the objectives of responding to Agency comments, finalizing the Phase 1 and 2 reports, and assisting the Office in the development of the subject Federal Register notice, as well as providing additional support for EPA's decisions on the selection of priority sector(s) to meet CERCLA 108(b) requirements.

And in July of 2009, EPA issued a Federal Register notice in accordance with the aforementioned court ruling, which identifies hard rock mining facilities (i.e. extraction, beneficiation, and processing of ores and non-metallic minerals), as the first class of facilities for which financial responsibility requirements will be considered for development under CERCLA 108(b). From a broad perspective, this work assignment seeks contractor support for activities that shall largely follow from this July 09 notice.

For the purposes of providing targeted research and analyses that helps expand upon the work already performed on CERCLA 108(b), Work Assignment Request # 2-41 was developed in October of 2009, to meet specific project needs (e.g., in terms of data collection, management, and analyses) necessary to support the regulatory development process for the subject rulemaking. More specifically, this work assignment called for contractor support on 3 primary categories of work: 1) the collection and analyses of data related to the projection/estimation of necessary "Levels of Assurance" for the rule; 2) the collection of firm-level financial records (i.e., on bankruptcies, revenues, etc.) of firms subject to the rule; and 3) the collection and analyses of data on the cost and benefits of the proposed requirements (i.e., conducting traditional regulatory impact analyses and executive order reviews), as necessary and sufficient to meet standard regulatory development needs for the subject rule(s).

Beginning the work outlined above under WA # 2-41, as soon as possible in 2009, was critical to meeting the analytical needs and administrative deadlines for the CERCLA 108(b) project. Consequently, a new WA #3-41 was put in place with the contractor, in order to cover that portion of the original scope of work which had yet to be completed under WA # 2-41. Additional contractor support was also approved under a subsequent WA #4-41. All contractor tasks as described above were predominantly performed under Contract #EP-W-07-011. However, since the period of performance for this contract is now ending and the Contract expires at the end of June 2011, a new Work Assignment (WA # B-7 outlined in Section 5 below) is being requested in order to maintain continuity and contractor support on this project.

Provided below is a table summarizing the list of prior Tasks authorized under WA #4-41. Also shown is the relevant status of these respective Tasks at the termination of the current contract. In addition, some Tasks under WA #4-41 were recently suspended in Feb/Mar of 2012 due to resource and scheduling constraints. All work associated with these suspended tasks was stop at the time of suspension authorized under Amendment 7 of WA #4-41. [Note: All such suspended Tasks appear stricken in the following table.]

Table 1: Status of Former Tasks within WA #4-41 of Contract #EP-W-07-011

Task # and Description of Deliverable	Project Status
Task #2) Collection of Necessary Data & Estimation of Levels of Assurance	Complete
Task #3) Collection of Available Financial Records for Hardrock Mining Facilities	Complete
Task #4) Assessment of Economic and Regulatory Impacts of the Proposed Rulemaking	Ongoing
Task #5) Consideration of Additional Classes Yet To Be Named	Complete
Task #6) Quality Assurance Project Plan	Complete
Task #8) Further QA/QC of Historical NPL CERCLA Sites for NAICS 324 & 325	Complete
Task #9) Identification and Documentation of the Universe of Currently Operating Facilities in NAICS 324 and 325	Complete
Task #10) Collection of Necessary Data & Estimation of Levels of Assurance for Facilities in NAICS 324 & 325	Complete
Task #11) Review & Assessment of Existing HRM Surveys & Quality Assurance of Estimated Response Costs at all Historic HRM sites	Complete
Task #12) Analyses of Current Cleanup & Assurance Mechanisms in Place Among the Universe to be Regulated within the HRM sector	Complete
Task #13) Analyses and Documentation to Support Small Business Regulatory Enforcement Fairness Act (SBREFA) and Small Business Advocacy Review (SBAR) Panel Process	Ongoing
Task #14) Research of Operation and Start Dates for Historical CERCLA Sites (both for HRM facilities and those in NAICS 324 and 325)	Suspended
Task #15) General Analytical Reporting	Complete

Task 16) Data Collection Regarding Existing Levels of Financial Assurance	Complete
Task 17) Documentation and Compilation of Docket Materials Relevant to the RIA	Suspended
Task 18) Internal Assistance to the Internal OSWER 108(b) Economics Workgroup	Suspended
Task 20) Other Factors that Might Impact Financial Assurance Amounts	Ongoing
Task 21) Costs for Third Party Financial Instruments	Complete
Task 22) ICR Support for Additional Classes	Suspended
Task 23) Consolidated Summary of all Existing NAICS 324/325 Data	Suspended
Task 24) Assessment of Data Needed for Additional Classes Related Analyses	Suspended
Task 25) Design of ICR Survey	Suspended
Task 27) Capacity and Market Conditions w/in the Financial Assurance Industry	Complete

5. **STATEMENT OF WORK FOR WA #B-7:**

As reflected in Table 1 above, there remains to be components of work and analyses that are still underway and will need to be carried forward into the scope of work for WA #B-7. These ongoing analyses represent typical contractor support services pertaining to regulatory impact analyses (RIA) necessary for rule writing and promulgation that will continue to be needed on an ongoing basis over the duration of this rulemaking.

Specifically, Task #s 4, 13, and 20 initiated in earlier Work Assignments are shown shaded in Table 1 to highlight their current status as “Ongoing”. These tasks focus on regulatory impact analyses, as well as other related analyses integral to the RIA process (e.g., such as small business impacts, etc.). Additional funding has been attained in order to continue conducting these key analyses under WA #B-7. Provided below is the scope of work for the Tasks being called for under WA #B-7.

Task 1: Work Plan and Budget Management

Within 20 calendar days of the receipt of the approved work assignment, the contractor shall deliver a work plan including a proposed level of effort by subtask, budget, and schedule of tasks through the term of performance. If there are any questions regarding the work plan, please contact the EPA WAM (and/or the Alternate WAM). The contractor shall maintain at least weekly communication with the EPA WAM and Alternate WAM in order to share any anticipated events which may cause an accelerated expenditure of approved funds for the period, and provide a monthly progress report

regarding the status of work on the work assignment. The contractor shall also provide management oversight of the work assignment throughout its entire period of performance.

In addition, the contractor shall provide a brief description (a sentence or two) in the monthly progress reports of the data-quality issues and activities achieved throughout the work assignment.

Task 2: Draft Assessment of Economic and Regulatory Impacts of the Proposed Rulemaking

Under this task, work to be conducted by the contractor shall consist of:

- 1) Selection of Fixed Financial Assurance amounts that can be used for a Fixed FA Option under the rule. An approach and supporting arguments are to be established in cooperation with the Agency, for the selection of Fixed FA amounts, on the basis of commodity categories currently being identified by EPA. It is assumed that the selection of such amounts are to be based on Historic Response Cost estimates and Existing FA data, as well as associated findings from Statistical Regressions that have already been (or are concurrently being) collected/conducted.
- 2) Formulation of an approach and supporting arguments are also to be established in cooperation with the Agency, for the selection of candidate approaches that would allow for “Adjustments” to the Fixed FA targets. Such an approach would be used to allow Fixed FA amounts to be tailored to accommodate for specific site features/characteristics, thereby allowing a more equitable amount to be established for certain facilities. For example, such a scheme could thereby allow for higher vs. lower adjusted FA amounts at facilities depending upon whether their respective site characteristics are or are not shown to be correlated with higher liability risks and response costs. Such an approach will require the identification of variables shown to be correlated with historical response cost estimates and existing FA amounts, as well as other potential dependent variables. Such adjustments are likely to be based on geologic, geographic, and/or process/management characteristics at any given facility (e.g. adjustments allowed for variations in disturbed acreage and proximity to surface water, etc... across facilities features). As such, independent variables of interest include, but are not limited to, Disturbed Acreage, Depth to Groundwater, Distance to Surface Water, Type of Commodity, On-site Processes (heap leach / no heap leach...), Pro-environmental Management Traits (ISO certification, ...), etc.
- 3) Derivation of draft estimates of the costs attributable to the FA amounts identified above. The costs of attaining FA are to be estimated by utilizing the amounts from 1) and 2) above, along with all data and analytical findings developed to date (e.g. Hist. Resp. Cost estimates, Cost of Mechanisms, Regression findings, Existing FA amounts already in place, Identified HRM Facilities to be Regulated universe and their respective financial data, Cost of Financial Instruments, Discounting Findings, etc.).
- 4) Assembling preliminary draft estimates of the monetary costs (and potential tradeoffs and benefits) associated with all alternative Financial Assurance mechanisms being considered, so that a Draft Economic Impact Analysis of the costs and benefits of the can be prepared in time to be available for in time for commencement of the SBA Review (SBAR Panel) Process related to the Regulatory Flexibility analyses for the rule (currently projected to commence no earlier than 3/1/12). [Notes: Such dates are projected and may therefore

change. Furthermore, improved cost estimates will likely need to be further developed, following ongoing refinement of the final financial assurance requirements to be chosen for the rule.]

- 5) Drawing on Industry Profiles and additional firm level data (including sales, revenues, number of employees, etc.), the contractor shall also conduct an analysis of “small entity” impacts associated with the proposed rule, in support of the necessary Reg. Flex. analysis and potential convening of SBAR Panel.

[NOTE: Much of the work to be conducted under Task 2 will be depended upon the results of concurrent tasks and analyses that may still be underway. Therefore, portions of the work under Task 2 may also need to wait to begin until after EPA is able to issue a Technical Directive to the contractor with this information.]

6. OVERALL SCHEDULE FOR DELIVERABLES

Task and Deliverable for WA # 4-41	Estimated Delivery
<u>Task 1 – Workplan and Budget Management</u>	
Deliverable 1: Workplan and Budget	20 days after receipt of the approved work assignment.
<u>Task 2 – Regulatory Impact Analyses</u>	
<u>Deliverable 2A</u> : Selection of Preliminary Fixed FA Amounts (by Commodity and/or Commodity Group)	30 Days after receipt of TD with CO Signature
<u>Deliverable 2B</u> : Selection of Options for Fixed FA Adjustments	30 Days after receipt of TD with CO Signature
<u>Deliverable 2C</u> : Draft Estimates of the Costs of selected Financial Assurance amounts (including cost of instruments and necessary collateral, etc...)	30 Days after submission of Deliverable 2B
<u>Deliverable 2D</u> : Draft RIA Analyses - estimates of comprehensive cost impacts of the rule in accordance with Exec. Order 12866 (including any Site Specific Assessment costs, Benefit estimates, etc.)	60 Days after submission of Deliverable 2C
<u>Deliverable 2E</u> : Draft SBREFA Analyses and Documentation to Support the SBREFA & SBAR Panel Process	30 Days after submission of Deliverable 2D (Note: Ongoing Deadlines to change in accordance with FLM negotiations and the SBAR Panel Process.)

7. **OTHER CONTRACTOR REQUIREMENTS**

The contractor shall comply with all applicable requirements of the contract, including compliance with all quality-assurance standards, provision of monthly invoices detailing progress and for notifying the WAM of the status of remaining funds, and other such requirements. The contractor must also ensure that the data collected for the characterization of environmental processes and conditions contain the appropriate QA/QC requirements to support the intended use of the data. In addition, the contractor shall make use of the following in developing the appropriate QA/QC requirements: *Guidance for Data Quality Objectives* (EPA QA/G-4), and *Guidance for Quality Assurance Project Plans* (EPA QA/G-5). These documents and others can be found at the following Agency website: <http://www.epa.gov/quality/qs-docs/>. Furthermore, all data and supporting documents used in the performance of this contract and all associated analyses shall be provided to EPA at the completion of the work, as well as at any such time that it is requested by the WAM or Alt. WAM.

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number B-7				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: <div style="text-align: right;">000001</div>				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2013			Title of Work Assignment/SF Site Name CERCLA 108b Econ Analyses				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED			Specify Section and paragraph of Contract SOW							
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 04/30/2012 To 04/29/2013				
Comments: The purpose of this amendment is to appoint Becky Cuthbertson as the alt. WAM, and to approve the contractor's work plan/cost estimate dated July 18, 2012, with total LOE of 706 hours and \$55,053.17 (b)(4) fee (b)(4)										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 674				
04/30/2012 To 04/29/2013										
This Action:						32				
Total:						706				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Scott Palmer						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature)</div>						Phone Number 703-308-8621				
						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature)</div>						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature)</div>						Phone Number:				
						FAX Number:				
Contracting Official Name Wendy Rizzo						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: center;">(Signature)</div>						Phone Number: 202-564-1596				
						FAX Number:				

Work Assignment Form, (WebForms v1.0)

Statement of Work
Work Assignment No. B-7
Amendment #2
EPA Contract #: EP-W-12-013

1. **TITLE:** CERCLA 108(b) – Economics Support for Financial Assurance Rulemaking

2. **PERIOD OF PERFORMANCE:** Date of CO signature through 12/31/2012

3. **WORK ASSIGNMENT MANAGER:** **Scott Palmer**
Economics and Risk Analysis Staff
Office of Resource Conservation & Recovery

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Alt WAM:

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4. **IN-DEPTH BACKGROUND ON PROJECT AND PRIOR CONTRACT SUPPORT:**

In late 2003, then US Environmental Protection Agency's (EPA's) Acting Deputy Administrator Stephen L. Johnson requested a comprehensive review of the Superfund program, with the objective of identifying opportunities for program efficiencies that would enable the Agency to ultimately complete more long-term clean-ups. The review, which came to be known as the 120-day Study, resulted in 102 recommendations to improve the Superfund program. Recommendation 12 suggested, "For facilities not covered under RCRA, OSWER should study whether promulgating new regulations under CERCLA's broad financial assurance authorities could reduce the future needs of the Superfund program." CERCLA, Section 108(b) requires EPA to promulgate regulations that compel classes of facilities (not governed by RCRA) to establish and maintain evidence of financial responsibility consistent with the degree of risk associated with the production, transportation, treatment, storage, and disposal of hazardous substances.

Subsequently, USEPA has been involved in significant ongoing analyses to assess the need to promulgate financial assurance regulations under CERCLA, 108(b). In an initial study of recent (post-1990) NPL sites, EPA identified a number of superfund sites representing seven general industry sectors for further examination. Under a former Work Assignment with Industrial Economics (IEc) (WA B-17), completed in December 2007, IEc performed detailed research and analysis of the seven industry categories previously identified by EPA. The information packet was used to support a briefing given to the Assistant Administrator for EPA's Office of Solid Waste and Emergency Response (OSWER) to assess next steps in the regulatory process. IEc also produced a draft report known as the Phase 2 report, (under WA 1-17) that documents, in detail, the methods employed and results of IEc's examination of facilities and industry practices performed under Work Assignment B-17.

A follow-on ruling issued by the United States District Court for the Northern District of California also found that EPA must identify and publish notice of priority classes of facilities that should be subject to financial assurance requirements. And subsequently, IEc conducted additional work (under WA 2-17), with the objectives of responding to Agency comments, finalizing the Phase 1 and 2 reports, and assisting the Office in the development of the subject Federal Register notice, as well as providing additional support for EPA's decisions on the selection of priority sector(s) to meet CERCLA 108(b) requirements.

And in July of 2009, EPA issued a Federal Register notice in accordance with the aforementioned court ruling, which identifies hard rock mining facilities (i.e. extraction, beneficiation, and processing of ores and non-metallic minerals), as the first class of facilities for which financial responsibility requirements will be considered for development under CERCLA 108(b). From a broad perspective, this work assignment seeks contractor support for activities that shall largely follow from this July 09 notice.

For the purposes of providing targeted research and analyses that helps expand upon the work already performed on CERCLA 108(b), Work Assignment Request # 2-41 was developed in October of 2009, to meet specific project needs (e.g., in terms of data collection, management, and analyses) necessary to support the regulatory development process for the subject rulemaking. More specifically, this work assignment called for contractor support on 3 primary categories of work: 1) the collection and analyses of data related to the projection/estimation of necessary "Levels of Assurance" for the rule; 2) the collection of firm-level financial records (i.e., on bankruptcies, revenues, etc.) of firms subject to the rule; and 3) the collection and analyses of data on the cost and benefits of the proposed requirements (i.e., conducting traditional regulatory impact analyses and executive order reviews), as necessary and sufficient to meet standard regulatory development needs for the subject rule(s).

Beginning the work outlined above under WA # 2-41, as soon as possible in 2009, was critical to meeting the analytical needs and administrative deadlines for the CERCLA 108(b) project. Consequently, a new WA #3-41 was put in place with the contractor, in order to cover that portion of the original scope of work which had yet to be completed under WA # 2-41. Additional contractor support was also approved under a subsequent WA #4-41. All contractor tasks as described above were predominantly performed under Contract #EP-W-07-011. However, this contract expired at the end of June 2012, and was replaced with a new Contract #: EP-W-12-013. And, a new Work Assignment (WA # B-7 has been approved to continue obtaining ongoing analytical support for this project.

All prior Tasks authorized under WA #4-41 were either completed or discontinued upon termination of the prior contract. The Tasks currently approved under WA #B-7 are summarized under Section 5 below. Section 6 then presents the scope of work to be covered by Amendment #2 of WA #B-7

5. SUMMARY OF APPROVED TASKS IN THE ORIGINAL WORK PLAN FOR WA #B-7:

Critical components of work and analyses are underway for the CERCLA 108(b) Financial Assurance Rulemaking, which is being conducted under the scope of work for WA #B-7. These ongoing analyses represent typical contractor support services pertaining to regulatory impact analyses (RIA) necessary for rule writing and promulgation that will continue to be needed on an ongoing basis over the duration of this rulemaking.

The original Work Assignment Request for WA #B-7 outlined a fuller extent of overall economic analyses envisioned to be necessary for promulgation of the subject rulemaking, including development of a RIA and analyses of small business impacts. However, while all these tasks are necessary components of the rulemaking process, it was recognized by both the government and the contractor that completion of all this work could not be achieved within the level of effort (LOE) available at the time of the WA Request for the original WA #B-7. Furthermore, because of both unresolved decisions and ongoing analyses, certain features of the rule are yet to be finalized. This of course results in increased uncertainty and more rule modifications that must in turn be accommodated by the contractor. In order to deal with the limited LOE, unresolved decisions, and project uncertainties, all Tasks under WA #B-7 (as specified in the Work Assignment) will be initiated via a Technical Directive, with joint understanding that all tasks necessary for rule promulgation cannot be completed within the available level of effort.

Under the approved Work Plan for WA #B-7, the portion of necessary analyses deemed to be a priority for the rulemaking includes:

- a) conducting continued data collection and analytical work (including historical response cost analysis, regression analyses, and identification and characterization of the historical and currently regulated universe of interest, etc.).
- b) development of an extensive database of the above data and findings, to be used as an ongoing information resource for the rulemaking process.

These information resources will serve as a basis for any future analyses, including selection of preliminary financial assurance amounts, RIA work, and small business impacts; and, to the extent funding remains after these information resources are developed, IEc will apply the findings of the work described above to conduct tasks and analyses as directed by the WAM (including selection of options for financial assurance amounts, associated cost analyses, etc.).

More specifically, priority analytical services to be provided by IEc shall include the following categories of work, as directed by the WAM.

1) Selection of Preliminary Fixed Financial Assurance (FA) Amounts for a Fixed FA Option under the Rule. To complete this task, IEC will rely on the results of the response cost and regression analyses of the sites within the historical universe.

a. **Although** IEC has previously conducted several versions of these analyses, EPA is currently working to finalize commodity categories for the historical sites. Once EPA provides these data to IEC, IEC will rerun response cost analysis using the previously developed algorithm.

b. Next, IEC will use the data collected by a subcontractor under WA #4-41 (under EP-W-07-011) to conduct an expanded regression analysis. This expanded analysis will include the following (previously unavailable or incomplete) variables: site acreage, depth to groundwater, and distance to surface water, etc.

c. Finally, to the extent possible, IEC will consider application of regression results to the sites within the potentially regulated universe. IEC will also utilize previously collected data on FA amounts that are currently posted at potentially regulated sites. The universe of potentially regulated sites is currently under development by the Agency. Once provided, IEC will use these data to commence work that involves sites within the potentially regulated universe. In addition, to conduct analyses on the potentially regulated universe, IEC may require an additional data collection effort (to ensure that the same set of variables is available for the historical and potentially regulated universe).

2) Selection of Options for Fixed FA Adjustments. In cooperation with the Agency, IEC will formulate an approach and supporting arguments for how Fixed FA amounts may be tailored to accommodate specific site features/characteristics. Such characteristics may include geologic, geographic, and/or process management characteristics. As noted above, the universe of potentially regulated sites is currently under development. Furthermore, a data source may need to be developed before the results of the historical analyses can be applied to the potentially regulated universe. After the necessary data resource is identified/developed, IEC will be able to formulate and apply the adjustment rules to the potentially regulated sites.

6. STATEMENT OF WORK FOR AMMENDMENT 1 OF WA #B-7:

Provided below is the scope of work for the Tasks being called for under Amendment #2 of WA #B-7. These tasks focus on regulatory impact analyses, as well as other related analyses integral to the RIA process (e.g., such as small business impacts, etc.). Additional funding has been attained in order to increase the LOE needed to complete more of the overall body of analyses needed for the subject rulemaking (as described below following the necessary scope for submission of the Work Plan).

Task 1: Work Plan and Budget Management

Within 20 calendar days of the receipt of the approved work assignment, the contractor shall deliver a work plan including a proposed level of effort by subtask, budget, and schedule of tasks through the term of performance. If there are any questions regarding the work plan, please contact the EPA WAM (and/or the Alternate WAM). The contractor shall maintain at least weekly communication

with the EPA WAM and Alternate WAM in order to share any anticipated events which may cause an accelerated expenditure of approved funds for the period, and provide a monthly progress report regarding the status of work on the work assignment. The contractor shall also provide management oversight of the work assignment throughout its entire period of performance.

In addition, the contractor shall provide a brief description (a sentence or two) in the monthly progress reports of the data-quality issues and activities achieved throughout the work assignment.

Task 2: Draft Assessment of Economic and Regulatory Impacts of the Proposed Rulemaking

Under this task, work to be conducted by the contractor (LOE permitting) shall consist of:

- 1) Draft Cost Estimates.** Based on the identification of FA amounts identified, IEc shall evaluate and derive costs attributable to these FA amounts, including the cost of obtaining FA instruments and necessary collateral. IEc shall rely on all data and analytical findings developed to date, including historical response cost estimates, cost of FA instruments, regression findings, existing financial amounts currently posted at sites within the potentially regulated universe, etc. And, IEc shall conduct additional research and analysis as necessary to identify costs of various FA instruments. In the event that such data are not unavailable, IEc shall rely on previously researched cost of Letter of Credit (LOC) as a proxy for all FA instruments. There are numerous additional costs that may be attributable to the rule, which shall also be identified and estimated as part of this task. This includes such things as the potential costs for site characterization and cleanup/closure cost estimation, as well as reporting and compliance requirements
- 2) Draft RIA Analyses – Estimates of Comprehensive Cost Impacts of the Rule.** IEc shall also develop draft estimates of the monetary costs, potential tradeoffs, and benefits associated with the alternative FA Mechanisms and Rule Options being considered. These data shall then be included in a Draft Economic Impact Analysis. IEc shall also rely on analytic results and research conducted under previous Work Assignments under contract EP-W-07-011 (for example, the discussion of benefits previously provided to EPA) as well as the findings of analyses conducted under the above subtasks. IEc shall strive to prepare this analysis in time for commencement of the Small Business Administration (SBA) Review (SBAR Panel) process related to the Regulatory Flexibility Analyses for the Rule. EPA further acknowledges that the timing and results of these efforts depend on EPA's provision of necessary data regarding the potentially regulated universe and the overall structure of the Rule.
- 3) Draft SBREFA Analyses.** IEc shall draw on Industry Profiles and additional firm-level data (sales, revenues, number of employees, etc.) to conduct an analysis of small entity impacts associated with the proposed Rule in support of the Regulatory Flexibility Analysis and potential convening of the SBAR Panel.

As with the original Work Plan for WA #B-7, all Tasks under Amendment #2 of WA #B-7 (as specified in the Work Assignment) will be initiated via a Technical Directive, with joint understanding that all tasks necessary for rule promulgation cannot be completed within the available level of effort.

7. **OVERALL SCHEDULE FOR DELIVERABLES**

Task and Deliverable for WA #B-7	Estimated Delivery
<u>Task 1 – Workplan and Budget Management</u> Deliverable 1: Workplan and Budget	20 days after receipt of the approved work assignment.
<u>Task 2 – Regulatory Impact Analyses Support</u> <u>Deliverable 2A:</u> Draft Cost Estimates <u>Deliverable 2B:</u> Draft RIA Analyses – w/ estimates of comprehensive cost impacts of the rule <u>Deliverable 2C:</u> Draft SBREFA Analyses and Documentation to Support the SBREFA & SBAR Panel Process	 30 Days after receipt of TD with CO Signature 60 Days after receipt of TD with CO Signature 30 Days after submission of Deliverable 2B

8. **OTHER CONTRACTOR REQUIREMENTS**

The contractor shall comply with all applicable requirements of the contract, including compliance with all quality-assurance standards, provision of monthly invoices detailing progress and for notifying the WAM of the status of remaining funds, and other such requirements. The contractor must also ensure that the data collected for the characterization of environmental processes and conditions contain the appropriate QA/QC requirements to support the intended use of the data. In addition, the contractor shall make use of the following in developing the appropriate QA/QC requirements: *Guidance for Data Quality Objectives* (EPA QA/G-4), and *Guidance for Quality Assurance Project Plans* (EPA QA/G-5). These documents and others can be found at the following Agency website: <http://www.epa.gov/quality/qs-docs/>. Furthermore, all data and supporting documents used in the performance of this contract and all associated analyses shall be provided to EPA at the completion of the work, as well as at any such time that it is requested by the WAM or Alt. WAM.

Work Assignment Form, (WebForms v1.0)

EPA CONTRACT NUMBER EP-W-12 -013

Statement of Work

Work Assignment Number: B-7

Work Assignment Amendment Number: 3

Title: CERCLA 108(b) – Economics Support for Financial Assurance Rulemaking

Work Assignment Manager (WAM): **Scott Palmer, Ph.D.**

Address: ERAS/PMCAO/ORCR/OSWER
Mail Code 5305P
1200 Pennsylvania Ave. N.W.
Washington, D.C. 20460

Telephone: (703)-308-8621
(703) 308-7903 (FAX)

Alternate WAM: **Becky Cuthbertson**

Address: ERAS/PMCAO/ORCR/OSWER
Mail Code 5305P
1200 Pennsylvania Ave. N.W.
Washington, D.C. 20460

Telephone: (703)308-8447
(703) 308-7903 (FAX)

BACKGROUND:

USEPA has been involved for several years in significant ongoing analyses to assess the need to promulgate financial assurance regulations under CERCLA, 108(b). And based on preliminary findings, in July of 2009 EPA issued a Federal Register notice which identifies hard rock mining facilities (i.e. extraction, beneficiation, and processing of ores and non-metallic minerals), as the first class of facilities for which financial responsibility requirements will be considered for development under CERCLA 108(b). From a broad perspective, this subject work assignment # B-7 is the latest in a series of such work assignments designed to obtain contractor support for activities that largely follow from this July 09 notice.

PURPOSE AND SCOPE OF THIS WORK ASSIGNMENT:

The purpose of this work assignment amendment is to de-scope the remainder of work and any unused LOE (level-of-effort) hours in the original work assignment, as well as subsequent amendments.

Task 1: Work Plans

The task of preparing a work plan has already been completed based on the requirements specified under the original work assignment, and the associated level of effort (LOE) for this task has already been invoiced and approved. No more additional work will be completed under this task at this time and there is no available LOE remaining for this task.

Task 2: Draft Assessment of Economic & Regulatory Impacts of the Proposed Rulemaking

This task was broken into 5 subtasks as listed below:

- Task 2A: Selection of Preliminary Fixed FA Amounts;
- Task 2B: Selection of Options for Fixed FA Adjustments;
- Task 2C: Draft Estimates of Costs of Selected FA Amounts;
- Task 2D: Draft RIA Analyses; and
- Task 2E: Draft SBREFA Analyses and Documentation necessary to Support the SBREFA and SBAR Panel.

Task 2 and all associated subtasks shall not be completed at this time. The LOE ceiling will as a result be reduced by 815 hours.

Deliverables for 108(b) Regulatory Impact related Analyses	
Items	Due Date to EPA
Task 1: Work Plan	Completed
Task 2A: No more work will be completed at this time.	Not Applicable
Task 2B: No more work will be completed at this time.	Not Applicable
Task 2C: No more work will be completed at this time.	Not Applicable
Task 2D: No more work will be completed at this time.	Not Applicable
Task 2E: No more work will be completed at this time.	Not Applicable

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number B-7				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000004				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2013 Base <input checked="" type="checkbox"/> Option Period Number			Title of Work Assignment/SF Site Name 108 (b) Financial Assurance Ru				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/30/2012 To 04/29/2013					
Comments: The purpose of this amendment is to place WA B-7 in stop work and to de-scope the remaining LOE for the uncompleted work. The new total estimated LOE is now 280 hours. The SOW is attached. The contractor shall only provide a cost estimate reflecting the de-scope and new total ceiling cost of the work assignment.										
<input checked="" type="checkbox"/> Superfund Accounting and Appropriations Data <input type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE: 1,107						
04/30/2012 To 04/29/2013										
This Action:				-827						
Total:				280						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Scott Palmer							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number 703-308-8621			
							FAX Number:			
Project Officer Name Shannon Sturgeon							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number: 703-605-0509			
							FAX Number: 703-308-7903			
Other Agency Official Name Lee Hofmann							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number: 703-308-8479			
							FAX Number:			
Contracting Official Name Christie Deskiewicz							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number: 202-564-3316			
							FAX Number:			

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number B-7				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: <div style="text-align: right;">000005</div>				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2013 Base <input checked="" type="checkbox"/> Option Period Number			Title of Work Assignment/SF Site Name CERCLA 108b - Economic Analyse				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 04/30/2012 To 04/29/2013				
Comments: The purpose of this amendment is to approve the final cost estimate for WA B-07. Per the previous amendment, this work assignment has been placed in stop work. The new total LOE is now 287 hours with a cost ceiling of \$34,535.23 (b)(4) cost (b)(4) fee).										
<input checked="" type="checkbox"/> Superfund Accounting and Appropriations Data <input type="checkbox"/> Non-Superfund										
SFO 22 Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 280				
04/30/2012 To 04/29/2013										
This Action:						7				
Total:						287				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Scott Palmer <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number 703-308-8621 FAX Number:				
Project Officer Name Shannon Sturgeon <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 703-605-0509 FAX Number: 703-308-7903				
Other Agency Official Name Lee Hofmann <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 703-308-8479 FAX Number:				
Contracting Official Name Christie Deskiewicz <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 202-564-3316 FAX Number:				

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number B-8				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2013 Base Option Period Number 4			Title of Work Assignment/SF Site Name Improv. Haz. Waste Gen. Reg. P				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 04/30/2012 To 04/29/2013				
Comments: This action initiates WA B-8 entitled "Economic Analysis for Improvements to the Hazardous Waste Generator Regulatory Program and Associated RCRA Support" for a LOE of 342 hrs. The contractor shall submit a work plan/cost estimate. Lyn Luben is hereby appointed as the Work Assignment Manager.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
04/30/2012 To 04/29/2013										
This Action:						342				
Total:						342				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Lyn Luben						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;"> (Signature) (Date) </div>						Phone Number 703-308-0508				
						FAX Number: 703-308-7903				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;"> (Signature) (Date) </div>						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;"> (Signature) (Date) </div>						Phone Number:				
						FAX Number:				
Contracting Official Name Christie Deskiewicz						Branch/Mail Code:				
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="display: flex; justify-content: space-between;"> (Signature) (Date) </div>						Phone Number: 202-564-3316				
						FAX Number:				

EPA CONTRACT NUMBER EP-W-12-013

Statement of Work

Work Assignment Number: B-8

Work Assignment Amendment Number: zero

Title: Economic Analysis and Related Support for: **Improvements to the Hazardous Waste Generator Regulatory Program, and Associated RCRA Work**

Work Assignment Manager (WAM): Lyn D Luben

Address: ERAS/ORCR/OSWER
Mail Code 5305P
1200 Pennsylvania Ave. N.W.
Washington, D.C. 20460

Telephone: (703)-308-0508
(703) 308-5268 (front office)
(703) 308-7903 (FAX)

BACKGROUND:

Executive Order 13563 (76 FR 3821, January 21, 2011), entitled “Improving Regulation and Regulatory Review,” supplements Executive Order 12866 by outlining the President’s regulatory strategy to support continued economic growth and job creation, while protecting the safety, health and rights of all Americans. The Order requires considering costs, reducing burdens on businesses and consumers, expanding opportunities for public involvement, designing flexible approaches, ensuring that sound science forms the basis of decisions, and retrospectively reviewing existing regulations. In response to this Order, the Office of Resource Conservation and Recovery (ORCR) has identified several improvements to the hazardous waste generator regulatory program. These improvements are relatively minor on an individual basis yet address a wide range of issues. In aggregate, the changes to the hazardous waste generator regulatory program proposed in this action are expected to significantly improve regulatory efficiency within the RCRA program.

PURPOSE AND SCOPE OF THIS WORK ASSIGNMENT:

The purpose of this Work Assignment (WA) is to provide for all analytical assessment needs related to costs, economic impacts, benefits, small entity impacts, and related technical and supporting analyses necessary to sustain the Agency's promulgation of the proposed rule: "Improvements to the Hazardous Waste Generator Regulatory Program."

The scope of this WA includes: methodology development; baseline determination; data collection, assessment, and quality control; analytic model development; options analysis; sensitivity analyses within options; selected document preparation, and benefits scoping. This SOW also includes assessment of impacts to small entities, and assessment of impacts to minority and low-income communities (environmental justice), assessment of unfunded mandates, and assessment of all other Executive Orders and Acts pertinent to this action. The proposed improvements to the hazardous waste generator regulatory program to be covered in this WA include, but may not be limited to the following:

1. Container labeling for small quantity generators (SQGs) and large quantity generators (LQGs);
2. Notification when certain events occur, such as closure, change of address, change of ownership, change in regulatory status, change in waste generated;
3. For SQGs, establishment of a baseline universe estimate and subsequent re-notification every six (6) years if they fail to otherwise re-notify;
4. Change in Biennial Report burden to states and regulated community when LQGs report only for the months they were an LQG vs. for the entire year;
5. Clean closure requirements (units and/or facilities) for large quantity generators (LQG) accumulating hazardous wastes in container units;
6. Episodic generator flexibility allowed for CESQG to either SQG or LQG, and SQG to LQG;
7. Intra-company waste consolidation flexibility from CESQG facilities to a LQG;
8. Secondary container requirement for non-permitted LQGs;
9. Modification of waste identification recordkeeping requirements;
10. Modifications to emergency response requirements, including contingency planning

Finally, this WA includes the preparation of emergency turnaround assessments, general supporting materials, briefings, general project coordination, and ongoing communication/outreach to the WAM/TOCOR.

WORK STATEMENT:

Task 1. Work Plan, Progress Reports and Budget

Within twenty (20) days of receipt of this work assignment, the contractor shall deliver a work plan. This plan shall include a proposed level of effort, budget, schedule of tasks, and schedule of deliverables. A cost proposal shall accompany this work plan.

All data collection, assessment, and quality issues associated with this Work Assignment shall adhere to EPA data quality guidance and requirements, as established in EPA Order 5360.1A2, EPA Manual 5360.A1, and OSWER's and ORCR's Quality Management Plans. See: http://www.epa.gov/quality/qa_docs.html

As part of the monthly progress reports for this Work Assignment, the Contractor shall provide a summary of all data collection and quality control activities conducted during each month.

No confidential business information (CBI) shall be collected or used under this Work Assignment. However, proprietary data may be used following written approval from the WAM/TOCOR.

Contractor travel is authorized under this Work Assignment. The contractor shall budget for no more than one overnight trip for two or less persons, round trip from Cambridge/Boston, MA to Arlington, VA/Washington, D.C.

Deliverable(s) and Schedule:

Work Plan and Budget within allotted time frame identified above.

Task 2: Programmatic Support

The contractor shall provide programmatic support in the area of short-term or quick turnaround technical assistance, analysis, and supporting documents to ORCR for the proposed rule **“Improvements to the Hazardous Waste Generator Regulatory Program,”** and related work.

Under this task the contractor shall develop and submit various general support documents and analyses directly or indirectly related to the proposed rule. Examples of such documents/analyses may include, but not be limited to:

- cost or cost savings summary tables addressing impacts of one or more of the regulatory improvement areas;
- benefits scoping paper(s);
- briefing packages;
- fact sheets, flow charts, or presentation graphics;

The need for and number of such documents is uncertain at the time of this work assignment, as is the full scope and exact focus of the rule. The WAM will provide a Technical Directive (TD) designed to clarify the need and scope of such document(s), as

necessary. The contractor shall budget for approximately three (3) TDs under this Task.

Deliverable(s) and Schedule:

DELIVERABLES	DUE DATES
Development of quick-turnaround support documents and analyses related to the rule: To be defined in each TD (e.g., briefing package, fact sheet)	<u>Draft</u> : Five Agency working days from receipt of TD and all supporting information. <u>Final</u> : Five Agency working days from receipt of all written WAM comments on draft.

Task 3: Regulatory Support

The contractor shall provide technical, cost, economic, human health and ecological benefits, and related analytical analyses and support to ORCR in development of the proposed regulation: **“Improvements to the Hazardous Waste Generator Regulatory Program.”** Under this Task Area the contractor shall establish two analytic baselines for each impacts-related aspect of the proposal. There shall be a regulatory baseline and a “real world” baseline. The regulatory baseline shall assume 100 percent compliance with all Federal and state requirements, the “real world” baseline shall incorporate an estimate of actual compliance. The contractor shall develop an approach for establishing a “real world” baseline and present this approach to the WAM prior to applying this baseline. Baseline development shall be initiated upon contractor receipt of this approved work assignment.

Building from each baseline, the contractor shall develop an analytical methodology, create the analytic model, and apply this model to estimate the economic impacts, costs, and benefits of the proposed approach for each improvement. The contractor shall also identify analytical limitations associated with the assessment for each issue/improvement assessment, or summarized in aggregate.

As this project advances, additional regulatory improvements, alternative options, and/or scenarios within options may be identified and require assessment. These modifications may be the result of Team determinations, ORCR management directives, or OMB comments. These additional needs will be identified, as necessary, via a Technical Directive (TD) issued by the WAM. The contractor shall budget for approximately three (3) alternative options assessment TDs under this Task.

Deliverable(s) and Schedule:

Draft and final deliverables shall be presented in response to the baseline development

requirements, and each Technical Directive. The first set of deliverables shall be in memo format, presenting a clear description of, and justification for the baseline, description of the analytical methodology, description of the data (universe, unit cost, etc.) and sources, presentation of findings, and identification of the key analytical limitations. The TD deliverables shall assess impacts (costs or cost savings and other benefits) to both the regulated community and governmental entities (Federal, state, and local). Tables, charts, and graphics shall be incorporated, as appropriate for both sets of deliverables, to enhance and clarify the presentation.

DELIVERABLES	DUE DATES
A) Baseline Development: Regulatory and Real World	<p><u>Draft Real World Methodology:</u> “Real World” methodology within fifteen (15) Agency working days following contractor receipt of this signed work assignment plus all necessary supporting information.</p> <p><u>Final Real World Methodology:</u> Five (5) Agency working days following contractor receipt of all WAM written comments on the draft.</p>
	<p><u>Regulatory Baseline:</u> No later than ten (10) Agency working days following WAM approval of the final “real world” baseline methodology.</p>
B) Economic impacts, costs, and benefits of the proposed approach for each improvement	<p><u>Draft Findings, by Issue:</u> No later than ten (10) Agency working days following WAM approval of final Regulatory Baseline.</p> <p><u>Final Findings, by Issue:</u> No later than five (5) Agency working days following contractor receipt of all written WAM comments on the draft.</p>
C) Per Each Technical Directive	<p><u>Draft:</u> Five (10) Agency working days following contractor receipt of each TD plus all necessary supporting information.</p> <p><u>Final:</u> Five (5) Agency working days following contractor receipt of all TOCOR written comments on the draft.</p>

Task 4: Data Collection, Review, and Evaluation

The contractor shall collect technical data, and provide analytical support, evaluation, and quality control for data related to the assessment of costs, benefits, and other impacts of the improvements to the hazardous waste generator regulatory program. This data collection shall include, but not be limited to the following: baseline establishment and universe characterization (CESQG¹, SQG, and LQG), identification of affected universe (regulated entities and government), estimated number of responses, unit cost or cost savings impacts (O&M and capital), benefits factors and unit values (based on benefits valuation feasibility), and labor-hour burden by proposed improvement, and labor category.

The contractor shall document all data sources, collection methodology, assumptions, analytical rules, and principles used for data collection, manipulation, and analyses.

Deliverable(s) and Schedule:

The deliverables under this Task shall document all data collected (e.g., baseline characterization, affected universe, unit costs), the data sources, data collection approach and quality control procedures, data assessment methodology, summary of data findings, key collection and assessment assumptions, and data limitations. Tables, charts, and graphic shall be included, as appropriate, to ensure clarity and ease of understanding. The draft deliverable for this set shall be due to the WAM no later than twenty (20) Agency working days following contractor receipt of this approved Work Assignment. The final deliverable shall incorporate all written comments received from the WAM and be delivered no later than ten (10) Agency working days following contractor receipt of all such comments.

The final deliverables under this Task shall be used, as appropriate, in the development of deliverables under Tasks 2, 3, 5, 6, and 7 of this Work Assignment.

Task 5: Economic Assessment Document

No Assessment development requirements under this Work Assignment.

Deliverable(s) and Schedule:

None

Task 6: Information Collection Request (ICR) Document

¹ The contractor shall contact and work with Phuc Phan (703-306-1013) of the Office of Resource Conservation and Recovery (ORCR) for development of the most recent CESQG universe estimate(s).

No ICR document preparation requirements under this Work Assignment.

Deliverable(s) and Schedule:

None

Task 7: General RCRA Support

Regulatory and non regulatory support requirements under RCRA are wide ranging and diverse. Multiple projects are ongoing simultaneously, often requiring various levels of support on a short turnaround basis. Under this Task, the contractor shall be prepared to develop cost, economic, benefit and other impact assessments targeted toward a wide range of diverse projects and level of effort associated with RCRA facilities and requirements. For example, requirements under this Task may include such projects as: a waste quantity assessment for the hazardous waste combustion MACT proposed rule, a summary assessment of the “Cost of RCRA,” and updates to the WARM v. MSW-DST model comparative assessment. Actual requirements under this task are not yet determined and will be clarified in a Technical Directive (TD). The contractor shall budget for approximately three (3) TDs under this Task.

Deliverable(s) and Schedule:

Draft and final deliverables shall be presented under this Task, for each Technical Directive. Each deliverable shall include charts, tables, and graphics, as necessary, plus plain English writing to ensure clarity of presentation. The draft deliverable for each TD shall be due to the WAM no later than ten (10) Agency working days following contractor receipt of the TD, plus all necessary supporting documentation. The final deliverable shall be due no later than five (5) Agency working days following contractor delivery of all written WAM comments on the draft.

Summary of Deliverables and Schedule		
<i>Task and Deliverable(s)</i>	<i>Draft</i>	<i>Final</i>
Task 1: <u>Work Plan, Progress Reports and Budget</u>		
Initial Work Plan and Budget	As required by Contract.	As required by Contract.
Task 2: <u>Programmatic Support</u>		
Development of quick-turnaround support documents and analyses related to the rule: To be defined in each TD (e.g., briefing package, fact sheet)	<u>Draft</u> : Five Agency working days from receipt of TD and all supporting information.	<u>Final</u> : Five Agency working days from receipt of all written WAM comments on draft.
Task 3: <u>Regulatory Support</u>		
A) Baseline Development: Regulatory and Real World	<u>Draft Real World Methodology</u> : “Real World” methodology within fifteen (15) Agency working days following contractor receipt of this signed work assignment plus all necessary supporting information.	<u>Final Real World Methodology</u> : Five (5) Agency working days following contractor receipt of all WAM written comments on the draft. <u>Regulatory Baseline</u> : No later than ten (10) Agency working days following WAM approval of the final “real world” baseline methodology.
B) Economic impacts, costs, and benefits of the proposed approach for each improvement	<u>Draft Findings, by Issue</u> : No later than ten (10) Agency working days following WAM approval of final Regulatory Baseline.	<u>Final Findings, by Issue</u> : No later than five (5) Agency working days following contractor receipt of all written WAM comments on the draft.
C) Per Each Technical Directive	<u>Draft</u> : Five (10) Agency working days following contractor receipt of each TD plus all necessary supporting information.	<u>Final</u> : Five (5) Agency working days following contractor receipt of all TOCOR written comments on the draft.

Task 4: <u>Data Collection, Review, and Evaluation</u>		
Data Collection, Review, and Evaluation	Twenty (20) Agency working days following contractor receipt of this approved Work Assignment	Ten (10) Agency working days following contractor receipt of all WAM such comments on draft.
Task 5: <u>Economic Assessment Document</u>		
Task 6: <u>Information Collection Request (ICR) Document</u>		
Task 7: <u>General RCRA Support</u>		
TD Deliverable(s)	Ten (10) Agency working days following contractor receipt of the TD, plus all necessary supporting information	Five (5) Agency working days following contractor receipt of all written comments on draft

WORK ASSIGNMENT ADDITIONAL REQUIREMENTS OFFICE OF RESOURCE CONSERVATION AND RECOVERY

The following additional terms and conditions are requirements of this task order:

TECHNICAL DIRECTION

In accordance with EPAAR 1552.237-71–*Technical Direction*, the WAM will provide Technical Direction during performance of this Work Assignment. Technical direction includes:

1. Instruction to the contractor that approves approaches, solutions, designs, or refinements; fills in details; completes the general description of work; shifts emphasis among work areas or tasks; and
2. Evaluation and acceptance of reports or other deliverables.

Technical Direction must be within the scope of the contract-level SOW. The WAM does not have the authority to issue Technical Direction which:

1. Requires additional work outside the scope of the contract or Work Assignment;
2. Constitutes a change as defined in the "Changes" clause;
3. Causes an increase or decrease in the estimated cost of the contract or Work Assignment;
4. Alters the period of performance of the contract or Work Assignment; or
5. Changes any of the other express terms or conditions of the contract or Work Assignment.

Technical Direction will be issued in writing by the WAM, or confirmed by the WAM in writing within five (5) calendar days after oral issuance, if oral instruction provided.

QUALITY ASSURANCE

Performance under this Work Assignment requires the contractor to prepare a Quality Assurance Project Plan (QAPP) to be included as part of the Work Assignment. The contractor shall submit a QAPP with its Work Plan in accordance with *EPA Requirements for Quality Assurance Project Plans (QA/R-5)* found here:

<http://www.epa.gov/QUALITY/qs-docs/r5-final.pdf>. The contractor's QAPP must be approved by the WAM and Quality Assurance Manager before Work Plan approval. Following approval of the contractor's QAPP, the contractor shall perform all tasks under this Work Assignment in accordance with the quality standards established in the QAPP.

SURVEY MANAGEMENT

Performance under this Work Assignment may require the contractor to create statistical surveys, perform data collection, use questionnaires, or perform statistical analysis of survey data. The contractor shall perform these tasks in accordance with the *EPA Survey Management Handbook* found here: <http://www.epa.gov/oamcinc1/0710295/attach12.pdf>.

COMMUNICATIONS PRODUCTS

Performance under this Work Assignment may require the contractor to develop deliverables that are considered by EPA to be “Communications Products.” If relevant, the contractor shall develop Communications Products in accordance with *EPA’s Policy and Implementation Guide for Communications Product Development and Approval* found here: <http://www.epa.gov/productreview/guide/index.html>. Additionally, if Communications Products require the use of EPA graphics, logos, or other identifiable materials, the Communications Products are further subject to the standards in *EPA’s Visual and Product Standards Graphics Manual* found here: <http://wedcor.cor.epa.gov/pages/TIM/VisualIdentity-6-19-07.pdf>.

APPENDIX

Description of Potentially Proposed Improvements to the Hazardous Waste Generator Regulatory Program

1) *Container Labeling for SQGs and LQGs:*

Under current regulations, SQGs and LQGs need only label their containers with the words, “Hazardous Waste.” This non-descript label provides no information to make co-workers, handlers and the general public about the risks associated with the container’s contents. Under this proposed regulatory improvement, the Agency is examining different options for improving risk awareness and risk communication for hazardous wastes accumulated in containers, including use of the DoT shipping label, OSHA labels, identification of hazardous waste codes, etc. that would be affixed to the outside of the container immediately upon determination, not upon shipment. The baseline determination for this improvement must consider current state requirements associated with waste determination and container labeling for CESQGs.

2) *Notification by SQGs and LQGs when specified events occur:*

Currently, the Agency does not have a reliable understanding of its LQG and particularly its SQG universes. Under current regulations, SQGs and LQGs need only notify once when they obtain their RCRA Identification number. LQGs must complete a Biennial Report so we have a reliable estimate of the LQG universe. But the Agency and states have no way of knowing if a SQG or LQG should close a waste accumulation unit or facility, change ownership or location, permanently change its regulatory status, change the types of wastes it generates, etc. Similarly, unlike LQGs, SQGs are not required to notify periodically if for some reason, they did not otherwise notify. This action would identify those events SQGs and LQGs would need to notify. In the case of SQGs, this action also would establish a process to estimate a baseline universe within three years after promulgation of this rule and a process for SQGs to re-notify every six years should states not require periodic re-notification or should an SQG not otherwise notify because it had no reason to re-notify. The cost of this action would include the time and materials necessary to determine and report SQG status on a periodic basis.

3) *Update of the Biennial Report (BR) Rule Reporting Requirements for One-Time LQG Quantity:*

Currently, most states follow EPA Biennial Report instructions and require LQGs to provide information on the total amount of hazardous wastes they generate and manage for

the entire calendar year, even if the facility was an LQG for only one month of the calendar year. However, a few states require LQGs to report the amounts of hazardous wastes they generate and manage only for the months they were an LQG. These states reference a 1982 FR notice requires facilities to only report for those months they were an LQG. This action would foster national consistency by modifying the Biennial Report regulations to make clear that LQGs must report the total amount of hazardous wastes they generate and manage for the entire calendar year, even if the facility was an LQG for only one month of the calendar year. Thus, LQGs in those states adhering to the 1982 FR notice would see a slight increase in burden since they would have to report the amount of hazardous waste they generated for the entire calendar year. Assessment of the reporting burden under this improvement must consider current state BR reporting requirements.

4) *Clean Closure Requirements (units and/or facilities) for Large Quantity Generators (LQG):*

Under current federal requirements, LQGs accumulating hazardous wastes in containers need not clean close when they close a container hazardous waste accumulation unit (usually a room), or completely close or shut down facility operations. Numerous damage cases exist showing the environmental impacts of LQGs walking away without properly closing. Under this action, EPA is proposing that facilities clean close when they either close a container hazardous waste accumulation unit, or completely close or shut down facility operations. For the most part, this will involve requiring LQGs to send any remaining hazardous wastes off-site to a permitted TSDF within 90 days of accumulating this waste (which is really part of the baseline) and meeting the requirements of 40 CFR 265.111 and 265.114 which basically involves cleaning up any residues or spills and equipment. As part of this action, LQGs would be required to verify via certified third party or in-house clean closure certification they have clean closed and notify EPA or their authorized state of such a closure (which is discussed above).

5) *Episodic Generator Flexibility Allowed for CESQG to Either SQG or LQG, and SQG to LQG:*

Currently, under RCRA, a generator's regulatory status is determined by the total amount of hazardous waste it generates on a month-by-month basis. The more a generator generates in a month, the higher the regulatory burden. However, periodically an event occurs, either planned (e.g., tank cleanout) or unplanned (e.g., spill or upset production process generating a of-spec product) that increases the amount of hazardous wastes it generates for a short period of time and as a result, changes its regulatory status. For example, a CESQG could, as a result of an episodic event, change its regulatory status to either a SQG or LQG.

Under this proposed action, EPA would develop an optional regulatory framework that episodic generators could comply with and still maintain their existing regulatory status. This framework would provide the following:

- Ensure flexibility to generators in addressing episodic events in return for enhanced environmental protection;
- Eliminate confusion over what constitutes episodic generation;
- Create national consistency by providing federal regulation for episodic generators;
- Prevent the abuse of provisional EPA ID Numbers related to episodic generators;
- Provide necessary oversight of any generators taking advantage of the rule through improved recordkeeping; and
- Respond to long-standing stakeholder concerns.

Additional details on this improvement are available in the Attachment.

6) *Secondary Container Requirement for Non-Permitted LQGs*

This improvement would involve LQGs purchasing a “secondary container” (e.g. tub, drum, receptacle, vessel) of different sizes based on the quantity of hazardous waste the facility accumulated over 90 days. This secondary container would have a platform located inside on the bottom where the hazardous waste drum or similar waste receptacle would sit. The secondary container would collect any spills or leaks from the waste receptacle sitting on the platform. This secondary container would only be required for liquid wastes (e.g., solvents), and not solids or semi-solids where any leaks could be easily controlled. The BR could be used to determine whether the wastes were liquid, and also the volume generated annually, which would then be divided by four to account for 90 day storage limitations.

Note: We believe that many LQGs may already have this tub/platform. Thus, incremental impact estimates should account for the existing baseline where this equipment may already be in place.

7) *Modification of Waste Identification Requirements:*

Currently, SQGs and LQGs must document their hazardous waste determinations using either generator knowledge or testing. Unclear is the requirement that generators document their negative hazardous waste determinations, or situations where a solid waste remains a solid waste. This action would explicitly require SQGs and LQGs to document their negative hazardous waste determinations, should they already not being so. We anticipate little or no incremental cost impacts to industry associated with this action. However, should this action assist the regulated community in avoiding costs associated with misinterpretation the current regulations, such cost savings may be attributed to this action. A qualitative discussion of such potential occurrences may be appropriate for this item.

8) *Regulatory Clarification of How Large Quantity Generators (LQGs) are Defined:*

The current regulations do not explicitly define what constitutes an LQG. The current definition is by exception (i.e., not a SQG or CESQG). This improvement will specifically define what constitutes a LQG under RCRA. We anticipate no incremental cost impacts to industry associated with this action. However, should this action assist the regulated community in avoiding costs associated with misinterpretation of the current regulations, such cost savings may be attributed to this action. A qualitative discussion of such potential occurrences may be appropriate for this item.

9) *Regulatory Clarification of Requirements for Conditionally Exempt Small Quantity Generators (CESQGs), Small Quantity Generators (SQGs), and LQGs.*

Currently, there are regulations strictly for SQGs and strictly for LQGs, while in other cases, there are some regulations for LQGs that also are applicable to SQGs. This action would be designed to provide clarification of the current requirements for CESQGs, SQGs, and LQGs. The Agency has determined that the current regulatory text for generators is confusing and not user-friendly. This proposed change would reorganize the regulations for CESQGs (See Part 261.5) and place this language where the regulations for SQGs and LQGs (See 40 CFR 262.34) are located. This proposed change would also reorganize the regulations for SQGs and LQGs to ensure enhanced clarity.

We anticipate no incremental cost impacts to industry associated with this action. However, should this action assist the regulated community in avoiding costs associated with misinterpreting the current regulations, such cost savings may be attributed to this action. A qualitative discussion of such potential occurrences may be appropriate for this item.

10) *Intra-Company LQG consolidation of CESQG hazardous waste*

This action would allow LQGs to consolidate the hazardous waste of CESQGs that belong to the same company. This would improve environmental protection by allowing LQGs to accept CESQG wastes rather than MSWLFs and also provide LQGs with economies in managing all of the hazardous wastes they generate and avoid potential Superfund liability.

More specifically, LQGs would be required to notify EPA or their authorized state that they are taking advantage of this optional regulatory framework, maintain records of who they were accepting wastes from, manage the waste on-site for 90 days or less once received, and report the amount of hazardous wastes received from their CESQGs as part of the Biennial Report. Similarly, CESQGs would be required to maintain records of their shipments to participating intra-company LQGs.

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number B-8				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2013 Base <input checked="" type="checkbox"/> Option Period Number			Title of Work Assignment/SF Site Name Hazardous Waste Generator				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 04/30/2012 To 04/29/2013				
Comments: The purpose of this amendment is to approve the contractor's work plan/cost estimate dated February 25, 2013 for a LOE of 342 hours and \$30,062.79 (b)(4) cost (b)(4) fee). This amendment also adds Phuc Phan as the alternate WAM.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
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5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 342				
04/30/2012 To 04/29/2013										
This Action:						0				
Total:						342				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Lyn Luben <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number 703-308-0508 FAX Number: 703-308-7903				
Project Officer Name Shannon Sturgeon <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 703-605-0509 FAX Number: 703-308-7903				
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: FAX Number:				
Contracting Official Name Christie Deskiewicz <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 202-564-3316 FAX Number:				

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number B-9				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2013 Base <input checked="" type="checkbox"/> Option Period Number			Title of Work Assignment/SF Site Name Peer Review of IWEM Beta V3				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 04/30/2012 To 04/29/2013				
Comments: This action initiates WA B-9, "Peer Review of IWEM Beta Version 3.0," with an LOE of 345 hours. In accordance with the contract terms and conditions, the contractor shall submit a work plan and cost estimate.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
04/30/2012 To 04/29/2013										
This Action:						345				
Total:						345				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:			Cost/Fee:			LOE:				
Cumulative Approved:			Cost/Fee:			LOE:				
Work Assignment Manager Name Taetaye Shimeles <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code: Phone Number 703-308-8729 FAX Number:				
Project Officer Name Shannon Sturgeon <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code: Phone Number: 703-605-0509 FAX Number: 703-308-7903				
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code: Phone Number: FAX Number:				
Contracting Official Name Wendy Rizzo <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code: Phone Number: 202-564-1596 FAX Number:				

EPA CONTRACT NUMBER EP-W-12-013

Statement of Work

Work Assignment Number: B-9

Work Assignment Amendment Number: N/A

Title: External Peer Review of the Industrial Waste Management Evaluation Model (IWEM) Beta Version 3.0

Work Assignment Manager (WAM): Taetaye Shimeles

OSWER/ORCR/PMCAO/ERAS
Mail Code 5305P
1200 Pennsylvania Ave. N.W.
Washington, D.C. 20460

(703)-308-8729
(703) 308-7903 (FAX)

Alternate WAM:

Zubair Saleem, Ph.D.

OSWER/ORCR/PMCAO/ERAS
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Washington, D.C. 20460

(703)308-0467
(703)308-0511 (FAX)

BACKGROUND:

The Industrial Waste Management Evaluation Model (IWEM), as developed by the EPA, provides a tiered analysis that helps to determine the most appropriate waste management unit (WMU) design to minimize or avoid adverse ground water impacts by evaluating one or more types of liners, the hydrologic conditions of the site, and the toxicity and expected leachate concentrations of the anticipated waste constituents. The previous two versions (Versions 1.0 and 2.0) had undergone external peer reviews in 2002 and 2008, respectively. For the IWEM Beta Version 3.0, an additional source module was added to evaluate the potential for contaminants release from drains and embankments along roadways.

PURPOSE AND SCOPE OF THIS WORK ASSIGNMENT:

The purpose of this work assignment is to provide necessary continued technical support to assist the Agency in conducting a scientific and independent peer review of the IWEM Beta Version 3.0. The objective of the peer review is to receive written comments from individual experts on the appropriateness of the IWEM's added module; input values for sensitive parameters; and the transparency and clarity of technical and user guide documents. All work shall be in compliance with the EPA Peer Review Handbook 3rd Edition, available at:

<http://www.epa.gov/peerreview/pdfs/Peer%20Review%20HandbookMay06.pdf>

The contractor shall conduct the following tasks to accomplish the objective of this project. Due to technical and management decision-making uncertainties, all work done under this work assignment shall be initiated through Technical Directives (TDs) submitted by the COR. The COR may submit up to four TDs under this work assignment. There shall be separate draft and final deliverables for each TD received under each task. These deliverables shall be in memo or report format, as appropriate for the material and requirements.

Task 1: Work Plan, Progress Reports and Budget

In accordance with the contract terms and conditions, the contractor shall prepare and deliver a work plan. This plan shall include a proposed level of effort, budget, schedule of tasks, schedule of deliverables, and key staff working on this work assignment. A cost proposal shall accompany this work plan. The work plan shall also identify any potential conflict(s) of interest.

All data collection, assessment, and quality issues associated with this Work Assignment shall adhere to EPA data quality guidance and requirements, as established in EPA Order 5360.1A2, EPA Manual 5360.A1, and OSWER's and ORCR's Quality Management Plans. See http://www.epa.gov/quality/qa_docs.html for more information.

As part of the weekly progress reports for this Work Assignment, the Contractor shall provide a summary of all data quality activities conducted during each week.

Task 2: Identifying and Selecting Peer Reviewers

After receipt of a TD from the COR providing the model, the documentation, and peer review charge to be used, the contractor shall independently identify a pool of potential reviewers and return a list of peer review candidates to the COR. This list shall include resumes, and a description of any actual or potential conflicts of interest. The candidate peer reviewers shall have a combined broad expertise in one or more of the following areas: ground water and surface water hydrology; subsurface and overland fate and transport modeling of contaminants from waste management units, embankments, and drains; waste management units design and contaminant transport; and general development of subsurface fate and transport models. The candidate reviewers shall have scientific credentials equivalent to a Ph.D. and shall be judged by authorship on original publications and/or reviews in peer-reviewed scientific journals. Reviewers may also be judged by other measures of expertise including professional accomplishments and recognition by professional societies. EPA can object to any peer reviewers identified by the contractor who has potential conflict of interest. From the pool of candidates approved by the COR, the contractor shall choose four or five peer reviewers. All the selection process shall be conducted in compliance with the EPA Peer Review Handbook 3rd Edition.

The contractor shall also deliver a draft invitation letter. The COR may provide comments on the draft invitation letter. Upon receipt of comments, the contractor shall incorporate such comments into the final invitation letter. The contractor shall provide a final copy of the

invitation letter to the COR.

Task 3: Development of Peer Review Material

Upon the selection of the qualified peer reviewers, the contractor shall prepare draft transmittal material for distribution to each reviewer that includes all requirements established in the TD, plus the following:

1. The reviewers' responsibility
2. The schedule of effort
3. The peer reviewer charge questions as submitted by the COR
4. IWEM Beta Version 3.0 and technical documentation
5. Previous versions of IWEM and related documentations (if requested by peer reviewers).

The deliverable under this Task shall be draft and final copies of all transmittal materials, including the cover letter to each reviewer.

Task 4: Conduct Peer Review, Compile Comments, and Prepare a Peer Review Report

Upon completion of Task 3, the contractor shall start to conduct and monitor the review process and deliverable due dates. Activities under this task shall include: distributing of any additional materials necessary for reviewers to effectively conduct the review; conducting the review process; receive and compiling reviewer comments; and producing a summary document.

The contractor shall receive and compile reviewers' written comments. The contractor shall review the comments to ensure that the reviewers have fulfilled their responsibilities under their agreement with the contractor. The contractor shall not edit or rearrange comments but provide them in an electronic format (MS Word and pdf) as they are sent in the original form with reviewers' cover/comment letter.

The deliverable under this Task shall also include the peer review summary report. This document shall include: a list of peer reviewers and their brief resumes; a brief introduction and summary of where peer reviewers agreed or disagreed; individual comments aggregated and organized by topic area and by charge question such that Agency's response to these comments is facilitated; and a collated and compiled version of the unedited, individual reviews. Draft and final versions of this document shall be presented to the COR.

IWEM Beta Version 3.0 Peer Review Schedule	
Items	Due Date to EPA
Contractor submits Work Plan	In accordance with the contract terms and conditions
Contractor delivers a list of potential Peer Reviewers and a draft invitational letter	No later than 10 days after receipt of TD
Contractor delivers the final Peer Reviewers list, final invitational letter and peer review materials	No later than 5 days after receiving EPA's comments on the peer reviewers list
Deliver reviewers comments	No later than 2 days after the receipt of comments from the reviewers
Contractors delivers the draft Peer Review Report	No later than 30 days after receiving EPA's comment on peer reviewers list
Contractors delivers the Final Peer Review Report	No later than 8 days after receiving EPA's comment on the draft report or no later than December 19, 2012 (whichever comes sooner)

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <h1 style="margin: 0;">EPA</h1> </div> <div style="text-align: center;"> <p>United States Environmental Protection Agency Washington, DC 20460</p> <h2 style="margin: 0;">Work Assignment</h2> </div> </div>		<p>Work Assignment Number B-9</p> <p><input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001</p>								
<p>Contract Number EP-W-12-013</p>		<p>Contract Period 04/30/2012 To 04/29/2013</p> <p>Base <input checked="" type="checkbox"/> Option Period Number</p>								
<p>Contractor INDUSTRIAL ECONOMICS, INCORPORATED</p>		<p>Specify Section and paragraph of Contract SOW</p>								
<p>Purpose:</p> <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Work Assignment <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Work Plan Approval </div> <div> <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Incremental Funding </div> </div>		<p>Period of Performance</p> <p>From 04/30/2012 To 04/29/2013</p>								
<p>Comments:</p> <p>The purpose of this amendment is to approve the contractor's work plan/cost estimate dated 09/25/2012 with LOE of 290 hours and \$34,810.20 (b)(4) cost (b)(4) fixed fee).</p>										
<input type="checkbox"/> Superfund		<p>Accounting and Appropriations Data</p>								
		<input checked="" type="checkbox"/> Non-Superfund								
<p>SFO (Max 2) 22 Note: To report additional accounting and appropriations date use EPA Form 1900-69A.</p>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
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Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE:		345		
04/30/2012 To 04/29/2013										
This Action:								-55		
Total:								290		
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Taetaye Shimeles						Branch/Mail Code:				
<div style="display: flex; justify-content: space-between;"> <div style="width: 40%; border-bottom: 1px solid black; margin-bottom: 5px;"></div> <div style="width: 40%; border-bottom: 1px solid black; margin-bottom: 5px;"></div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 40%;">(Signature)</div> <div style="width: 40%;">(Date)</div> </div>						Phone Number 703-308-8729				
						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
<div style="display: flex; justify-content: space-between;"> <div style="width: 40%; border-bottom: 1px solid black; margin-bottom: 5px;"></div> <div style="width: 40%; border-bottom: 1px solid black; margin-bottom: 5px;"></div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 40%;">(Signature)</div> <div style="width: 40%;">(Date)</div> </div>						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
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Contracting Official Name Wendy Rizzo						Branch/Mail Code:				
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						FAX Number:				

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number B-9				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000002				
Contract Number EP-W-12-013			Contract Period 04/30/2012 To 04/29/2013			Title of Work Assignment/SF Site Name				
			Base <input checked="" type="checkbox"/> Option Period Number			External Peer Review of IWEM 3				
Contractor INDUSTRIAL ECONOMICS, INCORPORATED					Specify Section and paragraph of Contract SOW					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 04/30/2012 To 04/29/2013					
Comments: The purpose of this amendment is to place WA B-09 in stop work, and to de-scope the remaining LOE for the uncompleted work. The new total estimated LOE is now 16 hours. The statement of work is attached. The contractor shall only provide a cost estimate reflecting the de-scope and new total ceiling cost of the work assignment.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO 22 (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 290				
04/30/2012 To 04/29/2013										
This Action:						-274				
Total:						16				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Taetaye Shimeles						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number 703-308-8729				
						FAX Number:				
Project Officer Name Shannon Sturgeon						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 703-605-0509				
						FAX Number: 703-308-7903				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name Christie Deskiewicz						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 202-564-3316				
						FAX Number:				

EPA CONTRACT NUMBER EP-W-12 -013

Statement of Work

Work Assignment Number: B-9

Work Assignment Amendment Number: 1

Title: External Peer Review of the Industrial Waste Management Evaluation Model (IWEM)
Beta Version 3.0

Work Assignment Manager (WAM): Taetaye Shimeles

Address: ERAS/PMCAO/ORCR/OSWER
Mail Code 5305P
1200 Pennsylvania Ave. N.W.
Washington, D.C. 20460

Telephone: (703)-308-8729
(703) 308-7903 (FAX)

Alternate WAM: **Zubair Saleem, Ph.D.**
Mail Code 5305P
1200 Pennsylvania Ave. N.W.
Washington, D.C. 20460

Telephone: (703)308-0467

BACKGROUND:

The Industrial Waste Management Evaluation Model (IWEM), as developed by the EPA provides a tiered analysis that helps to determine the most appropriate waste management unit (WMU) design to minimize or avoid adverse ground water impacts by evaluating one or more types of liners, the hydrologic conditions of the site, and the toxicity and expected leachate concentrations of the anticipated waste constituents. The pervious two versions (Version 1.0 and 2.0) had undergone external peer reviews in 2002 and 2008, respectively. For the IWEM Beta Version 3.0, an additional source module was added to evaluate the potential for contaminants release from drains and embankments along roadways.

PURPOSE AND SCOPE OF THIS WORK ASSIGNMENT:

The purpose of this work assignment amendment is to de-scope the remainder of work in the original work assignment and any unused level-of-efforts.

Task 1: Work Plan, Progress Reports and Budget

This task of preparing work plan is completed based on the requirements specified under the original work assignment. No more additional work will be completed under this task at this time and the level of effort ceiling is reduced by 3 hours.

Task 2: Identifying and Selecting Peer Reviewers

IWEM 3.0 Beta is still under development. The task of identifying and selecting peer reviewers will not be completed at this time. The level of effort ceiling will be reduced by 40 hours.

Task 3: Development of Peer Review Material

IWEM 3.0 Beta is still under development. The task of developing of peer review material will not be completed at this time. The level of effort ceiling will be reduced by 15.5 hours.

Task 4: Conduct Peer Review, Compile Comments and Prepare a Peer Review Report

IWEM 3.0 Beta is still under development. The task of conducting peer review, compiling peer review comment and preparing a peer review report will not be completed at this time. The level of effort will be ceiling reduced by 216 hours.

IWEM Beta Version 3.0 Peer Review Schedule	
Items	Due Date to EPA
Task 1: Work Plan	Completed
Task 2: No more work will be completed at this time.	Not Applicable
Task 3: No more work will be completed at this time.	Not Applicable
Task 4: No more work will be completed at this time.	Not Applicable

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <h1 style="margin: 0;">EPA</h1> </div> <div> <p>United States Environmental Protection Agency Washington, DC 20460</p> <h2 style="margin: 0;">Work Assignment</h2> </div> </div>		<p>Work Assignment Number B-9</p> <p><input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000003</p>								
<p>Contract Number EP-W-12-013</p>	<p>Contract Period 04/30/2012 To 04/29/2014</p> <p>Base <input checked="" type="checkbox"/> Option Period Number</p>	<p>Title of Work Assignment/SF Site Name Peer review IWEM beta 3.0</p>								
<p>Contractor INDUSTRIAL ECONOMICS, INCORPORATED</p>		<p>Specify Section and paragraph of Contract SOW</p>								
<p>Purpose:</p> <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Work Assignment <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Work Plan Approval </div> <div> <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Incremental Funding </div> </div>		<p>Period of Performance</p> <p>From 04/30/2012 To 04/29/2013</p>								
<p>Comments:</p> <p>The purpose of this amendment is to approve the contractor work plan/cost dated 04/01/2013 with LOE of 8.5 hrs and \$2,634.50 (b)(4) cost (b)(4) fee). The total LOE for this work assingment is now 9 hours. This work assignment is in stop work.</p>										
<div style="display: flex; justify-content: space-between; align-items: center;"> <input type="checkbox"/> Superfund <div>Accounting and Appropriations Data</div> <input checked="" type="checkbox"/> Non-Superfund </div>										
<p>SFO 22 Note: To report additional accounting and appropriations date use EPA Form 1900-69A.</p>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE:						
04/30/2012 To 04/29/2014				16						
This Action:				-7						
Total:				9						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
<p>Work Assignment Manager Name Taetaye Shimeles</p> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="width: 45%; text-align: center;"> <p>_____</p> <p>(Signature)</p> </div> <div style="width: 45%; text-align: center;"> <p>_____</p> <p>(Date)</p> </div> </div>						<p>Branch/Mail Code:</p> <p>Phone Number 703-308-8729</p> <p>FAX Number:</p>				
<p>Project Officer Name Shannon Sturgeon</p> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="width: 45%; text-align: center;"> <p>_____</p> <p>(Signature)</p> </div> <div style="width: 45%; text-align: center;"> <p>_____</p> <p>(Date)</p> </div> </div>						<p>Branch/Mail Code:</p> <p>Phone Number: 703-605-0509</p> <p>FAX Number: 703-308-7903</p>				
<p>Other Agency Official Name</p> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="width: 45%; text-align: center;"> <p>_____</p> <p>(Signature)</p> </div> <div style="width: 45%; text-align: center;"> <p>_____</p> <p>(Date)</p> </div> </div>						<p>Branch/Mail Code:</p> <p>Phone Number:</p> <p>FAX Number:</p>				
<p>Contracting Official Name Christie Deskiewicz</p> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="width: 45%; text-align: center;"> <p>_____</p> <p>(Signature)</p> </div> <div style="width: 45%; text-align: center;"> <p>_____</p> <p>(Date)</p> </div> </div>						<p>Branch/Mail Code:</p> <p>Phone Number: 202-564-3316</p> <p>FAX Number:</p>				